

Career and Technical Education

Introduction

Education Specialist Degree This program is 36 semester credits beyond the master's degree. Two concentrations are available leading to an education specialist degree in industrial and vocational education: (1) industry and technology; and (2) professional education.

The program is for those who have a master's degree in technical education, industrial education, technology education, vocational education or equivalent. (*Equivalency meaning agriculture, business education, marketing education, family and consumer education, and trade and industrial education.*) It is also for those who have a master's degree and are a certified employee of a technical college or community college.

Admission

Students seeking admission to the program should complete the following at least 30 days prior to the opening of the term in which they plan to begin their program.

1. File an Application for Admission.
2. Submit a current vita listing all pertinent biographical and educational data.
3. Present official transcripts of all college and university work completed certifying award of bachelor's and master's degrees in industrial education, industrial arts education, technology education, vocational education or an equivalent field with a cumulative grade point average of at least 3.25 on a four-point scale in all graduate work. Persons having master's degrees in other fields who are certified and employed in vocational-technical education are also eligible for admission. Transcripts need not be submitted for work completed at UW-Stout.
4. Provide evidence of at least two years of successful teaching experience and professional promise by requesting letters from at least two administrators or supervisors.

The Education Specialist Degree Program Committee, comprised of graduate faculty and an Ed. S. degree student, will review the candidate's credentials and make a recommendation relative to admission to the director of the Ed.S. degree program. The committee may recommend that certain standardized examinations be completed or that the candidate be interviewed by the committee. The director of the major will recommend admission with full or provisional status to the Graduate School.

After review of the application data, the Graduate School will assign program status and inform the student of it immediately.

- a. Full status will be granted to those who meet all admission requirements.
- b. Provisional status may be granted to those who do not fully qualify on some requirements. At the conclusion of the first term of enrollment, the status will be re-evaluated.
- c. Admission will be denied students whose qualifications do not meet the requirements and if the admissions committee decides provisional status is not warranted.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: application for admission; degree candidacy; final oral examination; and intent to graduate.

Degree Program Supervision

For the first enrollment, the program director will aid in developing a class schedule in keeping with degree requirements. Prior to enrolling for a second term, the student will prepare a total program plan in keeping with degree requirements and the student's special needs.

At that time, the student will work with the program director to obtain a supervisory committee consisting of three members of the graduate faculty.

The committee will act on the appropriateness of the student's degree program, approve the proposed field study, administer the oral examination and recommend the award of the degree.

Teaching Experience

This program is designed for people in education. It is felt that course work will be more significant for those who have some experience in teaching. Thus, no more than eight credits in the degree program may be completed prior to satisfying the requirement of two years of successful teaching experience.

Requirements for the Ed.S. Degree

Prior to the award of the Ed.S. degree, the following requirements will be met:

1. Completion of an approved degree program of 36 semester credits with an overall grade point average of at least 3.25, and with a minimum of 18 credits which are at the graduate only level – 700 or 800 level.
2. Filing of an Intent to Graduate form at least seven weeks prior to the expected graduation date.
3. Completion of an oral examination on field study research prior to graduation.
4. Filing of an approved field study report and abstract at least one week prior to graduation.
5. Recommendation for the degree by the supervisory committee.
6. Approval of degree candidacy at the appropriate time.

Industry and Technology Concentration

This concentration is designed for the graduate student desiring a broad educational experience leading to a professional career as a teacher of technology education, and industrial and technical subjects in high schools, vocational schools, technical colleges, junior colleges and universities.

Content for the advanced degree program will be drawn from three bodies of knowledge: (a) industry and technology; (b) applied research; and (c) professional education. Selection of these three components is based on the assumption that the holder of an advanced degree should be a scholar in the discipline (industry and technology), capable of solution of problems through applied research techniques (researcher), and a practicing educator.

Curriculum

The Ed.S. degree with a concentration in industry and technology consists of three groups of courses and/or experiences as follows: industry and technology, applied research, and professional education. The industry and technology component consists of courses basic to the science of industry and technology and a field study. This component is intended to be flexible in order to afford candidates an opportunity to broaden themselves if their prior work has been narrow, or to study in depth a particular conceptual area of industry and technology if their prior work has been broad in nature. In this component, the advanced graduate student will have the opportunity to take additional physics, chemistry, mathematics, sociology, psychology and course work to develop a level of competence in one or two conceptual areas in their substantive teaching field. The Impacts of Technology course, required of all students in the program, permits the students to look at how their teaching area has had an effect on people and society. The culminating activity is a field study. The main purpose of the field study is to provide students with an opportunity to apply and synthesize the contents of their program. Education specialists are encouraged to select practical problems related to their professional appointment or, if not presently employed, to select a problem from their discipline.

The applied research component consists of course work in computerscience, research design and procedures, and statistics. A holder of an advanced degree should have an intimate knowledge of research design, measurement and statistics, and a broad background in the problems associated with industrial and vocational education.

The professional education component consists of courses in the foundational areas of education and curriculum and instruction. There is a growing body of knowledge and research dealing with education and the instructional process. It is imperative that the education specialist be able to implement current innovative educational practices and thought into the curriculum and the teaching process.

The three components are shown here as they appear in the curriculum requirements for the degree.

Program Plan

To qualify for the Ed.S. degree with a concentration in industry and technology requires that the student earn not less than 36 semester credits beyond the master's degree which will be distributed as follows:

Industry and Technology		
16-20 credits		
TECED-895	Field Study in Industry and Technology	2-6
TECH-733	Impacts of Technology	2-3
	Selectives	7-14
Applied Research		
6-10 credits		
CS-741	Computer Programming Techniques	2
EDUC-816	Instrumentation for Research	3
	Selectives	1-5
Professional Education		
6-10 credits		
PSYC-850	Psychology of Development	3
	Selectives	3-7

Selectives

The student should confer with the program director in choosing selective credits to complete the 36-hour degree requirement. Students can specialize in one of several course sequences that we recommend in areas such as leadership, manufacturing, technology, program development and evaluation, training, or curriculum and instruction. There is considerable flexibility in the program with regard to selectives, and they may be taken as needed to fulfill the individual goals and objectives of the student.

Professional Education Concentration

This concentration has been designed for the individual who is committed to additional depth in preparation as a professional educator in the areas of curriculum and instruction, and the supervision of instruction. Content for the advanced degree program will be drawn from three bodies of knowledge: (a) industry and technology; (b) applied research; and (c) professional education. Selection of these three components is based on the assumption that the holder of an advanced degree should be a practicing educator, capable of solving problems through applied research techniques, and a scholar within a discipline.

Curriculum

The curriculum consists of three groups of courses and/or experiences as follows: industry and technology, applied research, and professional education (*curriculum and instruction, and the supervision of instruction*).

The industry and technology component consists of courses in the sciences basic to industry and technology (*math, computer science, sociology, psychology, communication and economics*), and the impacts of technology on society.

The applied research component consists of course work in management information systems, instrumentation for research, employment and training research, and planning. A holder of an advanced degree should have knowledge of research design, measurement and statistics, and an understanding of problems associated with industrial and vocational education.

The professional education component has two sub-components: curriculum and instruction, and the supervision of instruction. Curriculum and instruction involves the advanced graduate student in curriculum engineering, instructional systems, instructional strategies, structuring knowledge, principles of learning, guidance of learning activities, identification and determination of instructional content, and computer assisted instruction as related to technology, and industrial and vocational education. Supervision of instruction involves policy developments, cost analysis, cost effectiveness, program evaluation review techniques, accountability in education, decision making models, evaluation systems, improvement of instruction, financial aspects, coordination, leadership procedures, management information systems, and management techniques as related to industrial and vocational education. The culminating activity is a field study which is six semester credits of the total (16-20 credits) in this component. The field study provides the opportunity to put into practice some aspect of the program that will benefit both the student and the institutional setting where the student is employed or aspires to be employed.

Program Plan

To qualify for the Ed.S. degree with a concentration in professional education, the student must earn not less than 36 semester credits beyond the master's degree, which will be distributed as follows:

Industry and Technology		
6-10 credits		
TECH-733	Impacts of Technology	2-3
PSYC-850	Psychology of Development	3
	Selectives	0-5
Applied Research		
6-10 credits		
EDUC-816	Instrumentation for Research	3
	Selectives	3-7
Professional Education		
16-20 credits		
EDUC-895	Field Study in Professional Education	2-6
	Selectives	10-14

Selectives

The student should confer with the program director in choosing selective credits to complete the 36-hour degree requirement. There is considerable flexibility in the program with regard to selectives, and they may be taken as needed to fulfill the individual goals and objectives of the student.

School Psychology

Dr. Denise Maricle, Program Director, 413 Education and Human Services Building, 715/232-2229

Introduction

Education Specialist Degree Approved by the National Association of School Psychologists (NASP), this program provides training in both psychology and education. School psychologists use their knowledge, training, and skills to team with educators, parents and other mental health professionals. They work to maximize the learning of students and to develop safe, healthy and enriching school environments.

There are two degree options in the school psychology program. The Education Specialist degree (*Ed.S.*) option follows the completion of the Master of Science in Education degree (*M.S. Ed.*). After completing the *Ed.S.* degree, students are eligible for full certification by the Wisconsin Department of Public Instruction and the corresponding agency in most states. Students can become nationally certified (*NCSP*) by the National Association of School Psychologists by passing an exam.

The *Ed.S.* degree is a 36 to 47 credit degree program. After satisfactorily completing the required course work, practica, a yearlong (*nine month*) internship and a Specialist Thesis, students are awarded the degree.

Degree Program Admission

To be admitted with full status, the applicant must hold a master's degree in school psychology or a master's degree in a related field. Applicants must have a graduate grade point average of 3.25 or better to be admitted as full-status students. A limited number of applicants may be admitted on probationary status if their overall graduate grade point average is at least a 3.0.

It is recommended that applicants have a master's degree in school psychology. Applicants with master's degrees in related fields will be required to take the additional graduate course work necessary for certification as a school psychologist.

Applicants must submit the Graduate School Application form (*obtainable from the Graduate Office in Bowman Hall*), the Program Application form (*obtainable from the program director*) and their respective documents, along with a portfolio to the selection committee demonstrating their professional competencies related to the field of school psychology.

Students seeking admission to the program should complete and submit their application materials at least 30 days prior to the opening of the term in which they plan to begin their program. After a committee review of the application materials, candidates will be notified of their status prior to the intended enrollment term.

Primary Evaluation Processes

The primary process used to evaluate student performance is a regular review of the student's course grades, research activities, practicum evaluations, internship evaluations and professional conduct. Program faculty convene once a semester to evaluate each student's progress within the school psychology program. Degree candidacy is awarded to students who are in good standing, have fulfilled all Graduate School requirements for degree candidacy, have fulfilled all school psychology program requirements for degree candidacy and certification, have acquired 30-47 credits of course work in school psychology, have completed a nine-month internship, and have completed a Specialist Thesis. More information regarding the specific requirements is available in the program handbook (*available from the program director*).

Requirements

Requirements for the *Ed.S.* degree include (a) completion of at least 36 semester hours of graduate credit beyond the master's degree with an overall grade point average of 3.25 or better; a minimum of 18 credits must be in courses open only to graduate students – 700 and 800 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution which is outlined here.

The following courses are required for full certification as a school psychologist. The first 30 credits, including those courses indicated in bold type below, are applied toward the master's degree. The remaining credits, practica, internship and Specialist Thesis are applied toward the *Ed.S.* degree in school psychology. Students must attain a grade of "B" or better on all credits applied to the *Ed.S.* degree.

Core Professional Training

40 Credits

SPSY-753B	Laboratory – School Psychology	1
SPSY-743	Advanced Individual Mental Testing	3
SPSY-768	Diagnosis and Remediation of Learning Disabilities	2
SPSY-768A	Learning Disabilities Diagnosis and Remediation Laboratory .	1
SPSY-710	Psychoeducational Assessment of Young Children	2
SPSY-745	Assessment of Personality	2
SPSY-778	Psychoeducational Disability	3
SCOUN-760	Theories and Techniques of Behavior Modification	2
COUN-788	Counseling Process Laboratory	3
SPSY-775	School Consultation	2
SPSY-701	Seminar – School Psychology Services	2
SPSY-781	Field Practicum in Psychoeducational Services I	3
SPSY-782	Field Practicum in Psychoeducational Services II	3
SCOUN-705	Play Therapy	2
SCOUN-790	Supervised Secondary Counseling Practicum	3-6
COUN-752	Group Dynamics	2
SPSY-784	Clinical Practicum in Psychoeducational Services I	2
SPSY-785	Clinical Practicum in Psychoeducational Services II	2

Psychological Foundations

15-19 Credits

PSYC-850	Psychology of Development	3
PSYC-730	Advanced Psychology of Learning	2
COUN-675	Counseling Theory	3
SPSY-753	Psychometric Theory and Application	2
EDUC-740	Research Foundations	4
SPSY-735	Problems in School Psychology (<i>Plan B</i>) or	
SPSY-770	Thesis (<i>Plan A</i>)	2-6

Educational Foundations

8 Credits

SPED-630	Inclusion of Students with Exceptional Needs	3
SPSY-777	Legal and Ethical Issues for School Counselors and Psychologists	2
EDUC-536	Multiculturalism	2
EDUC-576	Cross-Cultural Field Experience	1

Education Specialist Degree Requirements

15-18 Credits

SPSY-792	Internship in School Psychology	6
SPSY-870	Specialist Thesis	3-6

Coursework completed during the master's program is indicated in **bold**.

Applied Psychology

Dr. Richard Tafalla, Program Director, 326 Education and Human Services Building, 715/232-1662

Introduction

Master of Science Degree This two-year program is designed around a core of psychological theories and principles, with three applied concentration areas: Industrial/Organizational Psychology, Program Evaluation, and Health Psychology. It provides students with the knowledge, experience, skills and abilities to apply the theories and methods of psychology to the identification and solution of a variety of complex individual and organizational problems.

Students will obtain a broad knowledge in psychological foundations; expertise in areas such as group functioning and conflict resolution; individual assessment and coping skills; leadership; assessment and intervention in health promotion; the design, implementation and evaluation of applied programs for individuals and organizations.

Professionals will be role models and agents of change within the organization in which they work. Their role will require a variety of complex interpersonal and self-evaluation skills. Most importantly, they will be teachers and will, therefore, need to model all the complex skills and processes in facilitation and mentoring.

The curriculum is in compliance with the standards adopted by the 1990 National Conference on Applied Master's Training in Psychology and required by the Council on Applied Master's Programs in Psychology. Prerequisites for the program include 15 credits in psychology at the graduate or undergraduate level, including research methods, statistical methods, and psychology of learning. The core curriculum provides a foundation and an organized group of experiences designed to facilitate skills and attitudes necessary for professional conduct. The curriculum in each concentration includes specific learning experiences to teach knowledge, skills and attitudes essential for a qualified professional. A selective group of courses will supplement the core and concentration. With faculty advisement, students will be allowed to select additional experiences appropriate for their unique personal and professional development, based on previous educational and professional experiences and goals.

Admission

In addition to admission requirements of the Graduate School, students must have completed eight semester credits in research methods, including one course in statistics; and fifteen semester credits of psychology, preferably including one course from each of the following areas: psychology of learning or behavior modification; personality, abnormal, mental health, individual differences; or general psychology.

Applicants must have an overall grade point average of 3.0. Applicants may be admitted on probationary status if their overall grade point average is at least 2.75 but less than 3.0. These exceptions are subject to a strict limit of 10 percent of the students in the program and must be individually negotiated with the recommendation of the program director and the approval of the Graduate School.

The program accepts applications and grants admission year around. However, to be given full consideration application materials must be submitted by February 1 for the summer and fall terms, and October 1 for the spring term. Priority for Graduate Assistantships will be given for those who meet these dates as well. After committee review, notification of acceptance will be made by March 1 for summer and fall terms, and November 1 for the spring term.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; related work experience; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 48 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better and a minimum of 24 credits in courses open only to graduate students—700 and 800 level; (b) successful completion of the 26 credits in the core and 22 credits from one of the concentrations; and (c) approval for degree candidacy at the appropriate time.

Required Core

26 credits required

PSYC-701	Diversity in the Workplace	1
PSYC-702	Ethics in Applied Psychology	1
PSYC-707	Applied Social Psychology	3
PSYC-708	Psychosocial Intervention	3
PSYC-710	Applied Psychology Seminar	3
PSYC-790	Applied Research Design in Psychology	3
PSYC-791	Research for Decision Making	3
PSYC-890	Applied Psychology Internship	1-5
PSYC-835	Field Study in Applied Psychology	2-4

Concentrations

Industrial/Organizational 22 credits

INMG-750	Organizational Development	3
PSYC-603	Management of Employee Reward Systems	3
PSYC-685	Recruitment and Selection of Human Resources	3
PSYC-781	Advanced Industrial Psychology	3

Students will choose 10 credits of selectives with faculty advisement and program director's approval.

Program Evaluation 22 credits

INMG-750	Organizational Development <i>or</i>	
EDUC-726	Administration	2-3
PSYC-750	Principles of Program Evaluation I	3
PSYC-751	Principles of Program Evaluation II	3
PSYC-771	Advanced Health Psychology <i>or</i>	
PSYC-875	Psychoeducational Intervention	3-4
PSYC-752	Practicum in Program Evaluation	3

Students will choose 6-7 credits of selectives with faculty advisement and program director's approval.

Health Psychology 22 credits

PSYC-771	Advanced Health Psychology	4
PSYC-850	Psychology of Development	3
PSYC-871	Applied Health Psychology	3
PSYC-875	Psychoeducational Intervention	3

Students will choose 9 credits of selectives with faculty advisement and program director's approval.

Career and Technical Education

Dr. Howard Lee, Program Director, 225A Applied Arts Bldg., 715/232-1251

Introduction

Master of Science Degree The graduate program in career and technical education is designed to increase the professional competence of those who plan to serve in a high school or post high school program as a teacher, coordinating teacher, coordinator, supervisor, Career and technical education coordinator or administrator of vocational education. Learning experiences in the immediate professional setting include internship, outreach courses and independent study.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75.

Applicants with undergraduate degrees and certification in the various subject areas of vocational-technical education are generally eligible.

Applicants with appropriate subject matter backgrounds, but who do not have the required professional education, will need to complete, for undergraduate credit, at least one appropriate methods course. This should be completed early in the program.

Applicants for the emphasis in Career and Technical Education Coordinator (CTEC) must complete, for undergraduate credit, a course in the principles, issues and/or philosophy of vocational-technical education. (*Request additional admission information from the program director for the CTEC concentration.*)

Prior to the awarding of the degree, the student must present evidence of the necessary amount and kind of occupational experience as specified by the appropriate state certifying agency.

A deficiency in these admission requirements does not preclude admission, but may require completion of additional undergraduate work and/or increase the amount of graduate credit required to earn a degree.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: application; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students – 700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution which is outlined here:

Preparation in Research

7-11 credits

TECED-739	Introduction to Research in Vocational/Technology Education	1
CTE-735	Problems in Vocational Education (<i>required in CTEC</i>) or	
CTE-770	Thesis-Vocational Education	2-6
EDUC-740	Research Foundations	4

Concentrations

Teaching

20-24 credits

CTE-502	Principles of Vocational, Technical and Adult Education	2
PSYC-730	Advanced Psychology of Learning	2
TECH-532	Futures of Technology	2

Plus, appropriate courses in the teaching/learning process.

Administration

20-24 credits

CTE-502	Principles of Vocational, Technical and Adult Education	2
PSYC-730	Advanced Psychology of Learning	2
TECH-532	Futures of Technology	2

Plus, appropriate courses in administration.

Career and Technical Education Coordinator

22-23 credits

This is the certification program for Career and Technical Education Coordinators in Wisconsin; similar positions exist in other states. Degree candidates choose between a research and a non-research option.

Required Core

CTE-560	Cooperative Occupational Education Programs	2
CTE-708	Issues in Career and Technical Education	2
CTE-710	Coordination and Supervision of Vocational Education	2
CTE-XXX	Policy and Issues in Career and Technical Education	2
CTE-746	Seminar	1-3
EDUC-575	Grant Writing	2
EDUC-726	Administration	2-3
EDUC-742	Program Evaluation	2
PSYC-579	Public Relations	2
SPSY-753	Psychometric Theory and Application	2

Non-Research Option (CTEC only)

CTE-XXX	Interpreting Career and Technical Education Research	3
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Select 11 credits from the following:

CTE-784	Internship-Local Vocational Education Coordinator or	
CTE-797	Field Experience	1-8
EDUC-750	Curriculum Theory and Practice	2-3
INMG-616	People Process Culture	2
INMG-750	Organizational Development	3
PSYC-730	Advanced Psychology of Learning	2

Marketing Education 4 credits

MEBE-701	Issues in Vocational Marketing Education	2
MEBE-702	Improving Marketing Education Methods/Materials	2

Special Needs 20-24 credits

CTE-502	Principles of Vocational, Technical and Adult Education	2
CTE-710	Coordination and Supervision of Vocational Education	2
SPEC-630	Inclusion of Students With Exceptional Needs	3
PSYC-730	Advanced Psychology of Learning	2

Select remaining credits from the following:

TECH-733	Impacts of Technology	2
CTE-534	Task Analysis	2
CTE-560	Cooperative Occupational Education Programs	2
CTE-746	Seminar	1-3
CTE-780	Internship – Vocational Education	4-8
CTE-792	Administration – Vocational, Technical and Adult Education	2
EDUC-536	Multiculturalism: Issues and Perspectives	2
SPED-516	Psychology of the Exceptional Child	2-3
SPED-518	Introduction to Teaching/Assessment in Special Education	2
SPED-526	Practicum in Special Education	2
SPED-662	Classroom Management Techniques	3
REHAB-723	Procedures of Vocational Evaluation	3

Preparation for Further Development

The student should confer with the program adviser in choosing the elective credits to complete the 30-hour degree requirements. There is considerable flexibility in the program with regard to electives, and they may be taken as needed to fulfill the individual goals and objectives of the student. Generally, if appropriate to your goal, electives may be chosen from your technical field. Persons preparing to teach will select advanced courses in their subject field. This bulletin lists graduate level technical courses, which are available for graduate credit in certain individual situations. Students are urged to investigate advanced subject matter courses suitable to their particular teaching field; in some teaching areas, it may be desirable to transfer them from another institution. However, prior approval to take any course should be obtained.

Education

Introduction

Master of Science Degree The purpose of the education program is to prepare individuals to work as professional teachers, or to enhance the skills they already have. The focus of the course work in the program is on the learner, teacher behavior, teaching-learning processes, research and evaluation. The program is open to professionals who provide instruction in any discipline or work with learners at any age level. The open concentration provides flexibility for students to choose course work which promotes their professional development goals.

A unique program is available for individuals who are interested in obtaining their teacher certification in Special Education/Cognitive Disabilities, grades K-12, while pursuing the education degree. Students do not need an undergraduate teaching degree to qualify for this program. In addition to the required course work for the education degree, an individualized plan is developed to meet Department of Public Instruction standards. The number of credits to qualify for certification will vary, depending on each student's undergraduate and graduate experiences. If students do not have a teaching undergraduate degree, they must complete all certification and degree requirements before being recommended for certification. At least 12 special education credits plus student teaching must be completed at UW-Stout to be recommended for certification.

Admission

To be admitted with full status to this program, the applicant must (1) hold a bachelor's degree from an accredited institution; (2) have an overall grade point average of at least 2.75, or an average of at least 2.90 in the last one-half of the undergraduate work. Applicants with an overall grade point average ranging from 2.5 to 2.75 who are seeking teacher certification may be considered for probationary admission. Enrollment is open throughout the year.

Applicants must provide both the Graduate School application form and the M.S. in Education program application form, including documents identified on the forms. Both forms are available online at <http://www.uwstout.edu/programs/mse/>.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; related work experience; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; (c) satisfactory completion of thesis or problems in education; and (d) a course distribution as outlined here:

Professional Core

EDUC-726	Administration	2-3
EDUC-782	Instructional Analysis	4
EDUC-7XX	Professional Portfolio	2
PSYC-730	Advanced Psychology of Learning or	
EDUC-6XX	Educational Psychology	2-3

Take one of the following, based on certification area:

EDUC-750	Curriculum Theory and Practice	2-3
SPED-524	Curriculum and Instruction Career and Transition Education	3
SPED-510	Methods, Materials and Curriculum for the Exceptional Child	3
FCSE-708	Curriculum Studies in Family and Consumer Sciences Education	2

Research

EDUC-729	Introduction to Educational Research	1
EDUC-740	Research Foundations or	
EDUC-742	Program Evaluation or	
EDUC-XXX	Grant Proposal Development	3-4
EDUC-735	Problems in Education or	
EDUC-770	Thesis	2-6

Concentrations

5-12 credits required

Professional Development Concentration

5-12 credits

Select courses that are compatible with the Professional Development Plan approved by your program director. On-campus students complete professional core and foundation classes on campus. Online students progress through the entire program with a cohort group in the sequence and time established.

Certification Concentration

8 credits

Certifications are currently available in Special Education, Early Childhood Education, and Family and Consumer Science. Additional undergraduate credits are required in some certification options. Students must meet with the program director to determine requirements for admission and certification.

Food and Nutritional Sciences

Dr. Janice Coker, Program Director, 205 Home Economics Building, 715/232-2239

Introduction

Master of Science Degree The graduate program in food and nutritional sciences combines a strong content knowledge base with expertise to conduct applied research. The curriculum is partitioned into three concentrations that augment the research and class core. The three concentrations are food science and technology; human nutritional science; and food packaging.

The general goals of the food and nutritional sciences program are to develop students that:

- Have a comprehensive knowledge base regarding food science and nutrition topics and are able to apply this knowledge through the appropriate use of advanced communication technologies and strategies;
- Excel in the design, implementation, evaluation, and dissemination of food and nutrition research;
- Demonstrate creative, critical, and strategic thinking skills that can be applied to food and nutrition issues;
- Formulate a philosophical and ethical approach to their work;
- Competently compete for, attain, and succeed in positions in food science, food safety, food packaging, clinical and public health nutrition, nutrition and education;
- May successfully sit for the dietetic registration examination upon completion of the UW-Stout dietetic internship.

Admission

Admission requirements include a bachelors degree, minimum grade point average of 3.0, and if English is a second language, a TOEFL score of 500. The GRE is not required. Course work requirements include one semester each of foods/food science; general microbiology; human anatomy and physiology; general chemistry; organic chemistry with laboratory; nutrition; advanced nutrition; advanced foods or experimental foods; and basic statistics.

Applicants with a grade point average ranging from 2.5 to 3.0 may be admitted on a probational basis. Admission may be on a provisional basis for applicants without the necessary course work. Upon satisfactory completion of the deficient course work, a provisionally admitted student will be fully admitted to the Graduate School.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; degree candidacy; research topic approval; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 40 semester credits with an overall grade point average of 3.0 or better, and a minimum of 20 of those credits in courses open only to graduate students—700 and 800 level; (b) approval of degree candidacy at the appropriate time; and (c) completion of the research and professional requirements.

Research Preparation

11 credits minimum

FN-770	Thesis in Food Science and Nutrition or	
FN-735	Problems in Food Science and Nutrition	2-6
STAT-520	Statistical Methods	3
PSYC-790	Applied Research Design	3
XXX-XXX	Approved research course(s)	3

Professional Preparation

20 credits minimum

Core Requirements

4 credits

FN-701	Trends in Foods or Nutrition	1-2
FN-720	Workshop in Foods and/or	
FN-721	Workshop in Nutrition	2

Concentrations

16 credits minimum

Choose from:

- **Food Science and Technology**
- **Human Nutritional Science**
- **Food Packaging**

Concentration courses may be selected from an approved list in consultation with the program director to meet individual needs of the student. See program director for concentration course selectives.

Note: FN-865 Supervised Practice in Medical Nutrition Management is the dietetic internship. Eight credits may be applied toward professional selective credits. Special admission required.

Guidance and Counseling

Introduction

Master of Science Degree The program in guidance and counseling provides a basic preparation in school counseling that leads to certification by the State of Wisconsin for employment in the public schools.

Students who seek certification from the Wisconsin Department of Public Instruction must meet both elementary and secondary requirements for certification as a school counselor on a K-12 basis, or they may choose either the elementary or the secondary option.

Learning experiences in the immediate professional setting include supervised counseling practicum and, in some concentrations, an internship.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.5, but less than 2.75. These exceptions are subject to a strict limit of 10 percent of the students in the program and must be individually negotiated with the recommendation of the program director and the approval of the Graduate School.

Both the Graduate School Application form (*obtainable from the Graduate Office*) and a Program Application form (*obtainable from the program director*) must be submitted by each applicant, including the documents identified on these two forms. Applicants must have presented and filed all required Graduate School documents to the Graduate Office and program material to the program director by February 1 for summer and fall terms, and October 1 for the spring term. After committee review and a personal interview, notification of acceptance will be made by May 1 for summer and fall terms, and December 1 for the spring term. The process and deadlines for selecting applicants will be strictly followed in each case.

Students will be admitted on the basis of academic performance, admissibility to the Graduate School, recommendations and rankings of a screening committee. These rankings are based on: 1. Experience in a helping profession, i.e., counseling, education, social work, psychology and volunteer activities; 2. Letters of recommendation from employers, instructors and consumers of services provided by the applicant; 3. An autobiographical statement in which the applicant has outlined assets and liabilities as a potential counselor trainee; and 4. Academic performance and potential. A personal interview with the program director and faculty is also required.

Requirements

The requirements for the degree requires a minimum of 36 credit hours (*not counting minimum competencies or internship*). Waived credits may not exceed those which would result in less than a 36-credit degree. Transfer credits may not exceed 12. An overall graduate grade point average of 3.0 or better is required, and a minimum grade of 2.75 is required for all core requirements. Students must also be approved for degree candidacy at the appropriate time and follow the approved program plan outlined here:

Core Requirements

Foundation (9 credits)

COUN-750	Counseling Theory	2
COUN-752	Group Dynamics	2
COUN-788	Counseling Process Laboratory	3
SPSY-753	Psychometric Theory and Application	2

Research (7-11 credits)

EDUC-729	Introduction to Research	1
EDUC-740	Research Foundations	4
SCOUN-735	Problems in Counseling and Psychological Services (<i>Plan B</i>) or	
SCOUN-770	Thesis (<i>Plan A</i>)	2-6

School Counseling (24-28 credits)

SCOUN-647	Behavior Problems of Children	2
SCOUN-733	Career Development Process and Issues	3
SCOUN-765	Organization and Administration of Guidance	3
SPSY-753A	Guidance Laboratory	1
SPSY-775	School Consultation	2
SPSY-777	Legal and Ethical Issues	2
SCOUN-760	Theories and Techniques in Behavior Modification	2
SCOUN-782	PK-12 Developmental Guidance	3
SCOUN-789	Elementary Counseling Practicum <i>and/or</i>	
SCOUN-790	Secondary Counseling Practicum	6

Elementary School Counseling (4 credits)

SCOUN-738	Guidance in the Elementary School	2
SCOUN-705	Play Therapy	2

Secondary School Counseling (2 credits)

SCOUN-787	Career/Occupational Placement and Transitions	2
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Selectives (1-3 credits)

SOC-710	Counseling and Symbolic Interactionism	3
PSYC-666	Alcoholism and Family Systems Intervention	2
PSYC-551	Child Social Reasoning	2
EDUC-726	Administration	2
EDUC-XXX	Approved seminar/current issues course	1-3
SPED-500	Introduction to Cognitive Disability	3
SPED-662	Classroom Management	3
SPSY-768A	Diagnosis and Remediation of Learning Disabilities	2
REHAB-717	Occupational Analysis Placement	3

Note: Depending on undergraduate degree major, some students are required to complete an additional 15-16 credits of course work in education.

Full Time or Part Time Study

Extended field placement (*practicum*) required in this program consists of 600 hours in the school. Part-time study while holding a full-time job is very difficult unless the employment provides considerable flexibility. The practicum may not be completed in the summer session because the time available is not extensive enough and regular school placements are not available. Therefore, full-time study for at least one calendar year is recommended. A substantial portion of the course work may be completed part time by attending summer sessions, attending during the regular semesters for late afternoon and evening classes, or enrolling in Continuing Education off-campus courses. However, a commitment for at least one semester is required at the point where the student is ready for the practicum field placement.

Home Economics

Dr. Karen Zimmerman, Program Director, 117 Home Economics Building, 715/232-2530

Introduction

Master of Science Degree The home economics program offers four concentrations. Each student's program is individually planned with the program director.

The **Early Childhood** concentration provides an opportunity for persons wishing to prepare for positions in child care administration, resource and referral, or teaching young children. Course work is also available to obtain Wisconsin certification for teaching grades 1-3 for students who already have obtained a bachelor's degree in Early Childhood Education from UW-Stout prior to 1990.

The **Apparel Design, Manufacturing and Retailing** concentration provides an opportunity for development of professional competencies in apparel design, apparel manufacturing, and/or retail. It prepares students for professional positions in business, merchandising or industry, or provides concentrated study for persons planning to teach at the college level.

The **Family and Consumer Education** concentration provides an opportunity for persons who are in or wish to prepare for a position which requires knowledge of several or all substantive areas of family and consumer sciences. Secondary teachers, as well as extension agents, frequently choose this concentration.

The **Family Studies and Human Development** concentration is designed for persons who want to work with families and individuals of all ages in community careers, extension and family life education settings (*e.g. parent education, elder care*).

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; student advisement; residency; program plan; degree candidacy; and intent to graduate.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants with an overall grade point average of 2.5 to 2.75 may be considered for probationary admission. This bachelor's degree will generally have been earned in the major areas of home economics.

Requirements

The requirements for this degree include completion of at least 30 hours of graduate credit with an overall grade point average of 3.0 or better. A minimum of 15 credits must be in courses open only to graduate students – 700 or 800 level. Students must be approved for degree candidacy at the appropriate time.

A common professional core is required of all students. The degree offers students a six-credit block of electives, and each concentration provides students with a selective area of specialty courses in addition to required course work.

Professional Core

12-16 credits required

CHD-700	Trends in Home Economics	2
HDFL704	Child/Family Services <i>or</i>	
HDFL-715	Theories of Family Processes <i>or</i>	
BURL-790	Seminar: Textiles, Clothing and Retail Marketing <i>or</i>	
APRL-790	Seminar in Textiles, Clothing and Retail Marketing	2
FCSE-710	Applied Evaluation	2
EDUC-740	Research Foundations	4

Select one of the following:

BURL-735	Problems in Textiles, Clothing and Retail Marketing	2
APRL-770	Thesis – Textiles, Clothing and Retail Marketing	2-6
BURL-770	Thesis – Textiles, Clothing and Retail Marketing	2-6
APRL-735	Problems in Textiles, Clothing and Retail Marketing	2
APRL-769	Design Option Thesis	2-6
FCSE-770	Thesis – Home Economics	2-6
FCSE-735	Problems in Home Economics	2

Electives

6 credits required

Concentrations

Early Childhood **12 credits**

FCSE-708	Curriculum Studies	2
	Selectives*	10

Apparel Design, Manufacturing and Retailing **12 credits**

BURL-519	International Economic Trends in Textiles and Clothing	3
	Selectives*	9

Family and Consumer Education **12 credits**

FCSE-708	Curriculum Studies	2
	Selectives*	10

Family Studies and Human Development **12 credits**

HDFL-728	Family Life Issues	2
	Selectives*	10

* Selectives will provide in-depth knowledge in the student's chosen concentration. The student will choose the appropriate number of selective courses from the approved lists with faculty advisement.

Hospitality and Tourism

Mr. Robert Davies, Program Director, 448 Home Economics Building, 715/232-1480

Introduction

Master of Science Degree The hospitality and tourism graduate program is designed for persons desiring to enhance their management and research skills. The program goal is to challenge students with an educational experience that will prepare them to make significant contributions as management professionals.

Both concentrations are broad-based to anticipate rapid changes evident in the industry. Entering students bring the perspectives of varied educational and employment backgrounds. Program graduates enjoy diverse career opportunities in teaching; in state, national, and international agencies; and in industry trade associations. At the completion of this program, graduate students will have enhanced their management abilities through:

1. Understanding societal needs for leisure and business travel activities, and the requirements for implementing hospitality and tourism programs responsive to these needs.
2. Developing the capability to resolve problems at the management level of hospitality and tourism organization.
3. Conducting and interpreting intra- and interdisciplinary research.
4. Acquiring a knowledge of literature germane to hospitality and tourism.
5. Understanding the network of relationships among the components of hospitality and tourism, including impacts on the host society.
6. Identifying leading state, national and international organizations in hospitality and tourism.
7. Acquiring knowledge of sources of information germane to hospitality and tourism.
8. Applying computer capabilities to hospitality and tourism problems.

Admission

To be admitted with full status to this program, the applicant must (1) hold a bachelor's degree from an accredited institution; (2) have an overall grade point average of at least 3.0 on a 4.0 scale [A = 4]. Applicants who have an overall grade point average ranging from 2.5 to 3.0 may be considered for probationary admission if other requirements are met.; (3) International students must score a minimum of 550 on the TOEFL.

This program is designed for applicants with an undergraduate major in hotel and restaurant or tourism management, or equivalent. However, applicants with bachelor's degrees in such fields as sociology, history, anthropology, geography, marketing, business administration, recreation or foreign languages are welcome. Those applicants whose preparation for the program is deemed to be deficient will be required to complete additional work, which may be at the undergraduate level.

Students seeking full admission to the program will be expected to have had one course in each of the following areas or equivalent experience:

- Accounting
- Restaurant operation
- Introduction to hospitality and tourism
- Lodging operation
- Sociology or Anthropology
- Development of tourism or tourism goods and services

Students applying to the Hospitality or Tourism concentrations are advised to complete the application process by May 1 for summer and fall terms, and by October 1 for the spring term. However, late applications may be considered. Application materials for the Global Hospitality Management concentration must be received by August 1 for the fall term and December 1 for the spring term. Both a Graduate School application form and a Hospitality and Tourism program application are required. All required admission documents, including official transcripts of all previous graduate and undergraduate work completed, should be received by the Graduate Office by these dates.

Students will be admitted on the basis of academic performance and other factors appropriate for consideration as follows:

- a. work experience in the hospitality and tourism industry.
- b. letters of recommendation from employers and/or previous college instructors.
- c. ratings of the applicant as judged by a screening committee and program director's recommendation.

Requirements

The requirements for this degree include (a) completion of at least 36 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 18 credits must be in courses open only to graduate students-700-800 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Required Courses

15-19 credits for on-campus candidates; 9 credits for online candidates

EDUC-740	Research Foundations or	
INMG-700	Systems Analysis and Design	3-4
HT-700	Issues in Hospitality and Tourism*	3
HT-701	Hospitality and Tourism Research Interpretation*	3
HT-702	Seminar in Hospitality and Tourism	1
HT-717	Hospitality and Tourism Colloquium I	1
HT-718	Hospitality and Tourism Colloquium II	1
HT-770	Thesis-Hospitality and Tourism or	
HT-735	Problems in Hospitality and Tourism*	3-6

* Online concentration [Global Hospitality Management]

Concentrations

Hospitality

10 credits

HT-755 Leadership and Management in Hospitality Industries	3
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Students consult with Program Director regarding concentration selectives

Tourism

10 credits

HT-640 Sociocultural System of Tourism	3
HT-742 Tourism Development	3

Students consult with Program Director regarding concentration selectives

Global Hospitality Management [online]

18 credits

HT-751 Strategic Management in Hospitality*	3
HT-753 Managing Finance in Hospitality Industry*	3
HT-754 Managing Technology in Hospitality and Service Industry*	3
HT-755 Leadership and Management in Hospitality Industry*	3
HT-756 Hospitality and Tourism	
Quality Assurance and Customer Service*	3
HT-758 Hospitality Operational Systems*	3

* Online concentration only [Global Hospitality Management]

Professional Elective Core

7-11 professional elective credits for on-campus concentrations approved in consultation with program director.

9 professional elective credits for online concentration approved in consultation with program director.

Global Hospitality Management Concentration

The hospitality and tourism program has partnered with European and Asian universities to deliver a unique global graduate program. The global hospitality management concentration is designed for the working professional worldwide that cannot attend the traditional university classroom. This specialized 36-credit master of science degree is delivered online in three credit courses over a period of 30 months. Nine of the 36 concentration credits can be selected from the participating partner institutions.

Students join a global network of learners. Classmates represent hospitality professionals around the world. Students become part of an action-learning environment that is not limited by time or space. Students will obtain a variety of career and academic benefits; a fully accredited program, virtual classroom flexibility, global experience, collaborative learning and enhanced career advancement.

Admission to the Global Concentration

In addition to admission requirements already outlined, this concentration requires:

- A minimum of three years full-time, hospitality-related work experience. Three years experience at the supervisory or managerial level is preferred.
- Demonstrated or willingness to acquire proficiency in accounting and finance.
- Three recommendations
- Resume

Applicants for the global concentration should maintain the following technical skills and computer equipment:

- Pentium level computer with CD ROM drive and 125MB or more RAM; 600MHZ or higher; multimedia capability; and 56K modem.
- Access to the Internet — DSL or cable recommended.
- Word processing, spreadsheet, Internet browsing and basic operating system skills.

Industrial / Technology Education

Introduction

Master of Science Degree This program is especially designed for individuals with undergraduate preparation in industrial arts, industrial education, technology education and related fields. However, it is also open to others interested in entering the technology education field.

The program provides opportunities for students to expand their knowledge and competence in technology education. Specifically, this program will provide students the opportunity to:

1. Understand the history, issues and philosophy of industrial/technology education.
2. Develop or expand competence in curriculum development.
3. Understand and apply learning theory to develop teaching strategies suitable for teaching in classroom and laboratory or work settings.
4. Develop effective interpersonal relationship skills.
5. Develop or expand the ability to organize, manage and maintain a technology education laboratory or work environment.
6. Design and use evaluation instruments and procedures.
7. Develop or expand competence in technical areas suitable for teaching technology education.
8. Understand and be able to use information gained from technical and educational research.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree in industrial arts education or technology education (*or equivalent*) from an accredited college and have an overall grade point average of at least 2.75. Applicants with an overall grade point average ranging from 2.5 to 2.75 may be considered for probationary admission. This assumes preparation and certification (*or eligibility for certification*) for teaching industrial arts or technology education.

A deficiency in these admission requirements does not preclude admission, but it may require completion of additional undergraduate work and/or increase the amount of graduate credit required to earn the degree.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; degree candidacy; and intent to graduate.

Requirements

Requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students — 700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as follows:

Preparation in Research

5 credits

TECED-739	Introduction to Research in Vocational/Technology Education	1
EDUC-740	Research Foundations	4

Preparation Basic to Program

14 credits

TECED-704	History/Philosophy of Technology Education	2
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Cluster 1. Foundations in Philosophy or Psychology

Select at least one of the following:

TECED-708	Issues in Technology Education	2
TECH-532	Futures of Technology	2
PSYC-730	Advanced Psychology of Learning	2

Cluster 2. Curriculum and Program Development

Select at least two of the following:

TECED-530	Implementing Technology Education	3
TECED-638	Course Construction	2
TECED-710	Curricular Innovations in Technology Education	2
VTAE-674	Adult Education	2
EDUC-750	Curriculum Theory and Practice	2-3

Cluster 3. Facilitation and Management of Learning

Select at least one of the following:

TECED-533	Technical/Vocational Planning Laboratories	2
TECED-603	Activities in Technology/Vocational Education	2
TECED-637	Organization and Management of Technical Labs	2
XXXX-XXX	Graduate level computer course	

Cluster 4. Evaluation

EDUC-742	Program Evaluation	3
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Cluster 5. Technical Research

XXXX-792	Special Project in any technology area	2-6
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Cluster 6. Research

TECED-735	Problems in Industrial/Technology Education	2
TECED-770	Thesis – Industrial/Technology Education	6

Preparation for Further Development

For students planning careers in teaching, it is recommended that their technical work (*graduate and undergraduate*) total at least 45 semester hours. Additional electives will be selected with approval of the graduate program director. A complete list of graduate work appropriate to this degree program is maintained by the program director.

Preparation Through Advisement Patterns

This program is designed so that at least one of a variety of advisement patterns can be developed within the framework of the industrial education degree programs. Beyond the preparation in research (7-11 credits) and preparation basic to the program (14 credits), students will choose, in consultation with their program director, an advisement pattern supporting their work-role/life-role goals and select learning experiences (*course work*) which will support them in such areas as industrial or technology education teacher, supervisor or administrator in elementary, middle-junior high school, senior high school, post-high school, college or university, industry or other selected areas.

Management Technology

Introduction

Master of Science Degree This program provides educational experiences that prepare graduates for management and staff positions in business and industry. The students select a technical specialty area depending on their professional goals, educational background and available faculty expertise. Technical specialties such as Production Operations, Quality Management, Graphic Communications, Packaging, or Telecommunication Systems may be developed. Learning experiences in the immediate professional setting include advanced technical problems and the field project.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college, have an overall grade point average of at least 2.75 and have the equivalent of two years of appropriate work or military experience. Applicants who have an overall grade point average ranging from 2.5 to 2.75 may be considered for probationary admission if other requirements are met.

Prerequisite courses may be prescribed upon evaluation of undergraduate transcripts if the student does not have a strong background in production management, accounting, engineering economy, statistics and a technical area.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; self assessment; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better, a minimum of 15 credits must be in courses open only to graduate students – 700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Professional Foundations

13 credits

INMGT-700	Systems Analysis and Design	3
INMGT-705	Enterprise Resource Planning	3
INMGT-710	Seminar in Industrial Operation	2
INMGT-740	Introduction to Decision Theory	3
BUMGT-760	Corporate Planning	2

Leadership

Minimum of 5 credits

BUINB-688	International Business Practicum	3
INMGT-565	Project Management	2
INMGT-600	Organizational Leadership	3
INMGT-616	People, Process, Organization Culture	2
INMGT-630	Employee Involvement: Work Teams	2
INMGT-750	Organizational Development	3
PSYC-603	Employee Reward Systems	3
RC-781	Risk Management in Loss Control	3
TRHRD-560	Training Systems in Business and Industry	3

Technical Specialty

Minimum of 8 credits

Students select a technical specialty area depending on their professional goals, educational background and available faculty expertise. The courses within the technical specialty area are selected with the advisement of the program director. Specialties are developed to meet changing business and industrial needs.

Research

Minimum of 2 credits

INMGT-735	Problems in Management Technology	2
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Mental Health Counseling

Introduction

Master of Science Degree The Mental Health Counseling program provides students with the assessment, diagnosis, prevention, and treatment skills necessary for helping with behavioral and emotional difficulties of clients from a diversity of backgrounds. Training in mental health counseling services includes the provision of principles and theories of counseling and psychotherapy, group dynamics, family systems theories, human and career development, and psychological assessment, as well as understanding and remediation of the causes of mental illness and dysfunctional behavior. Mental health counselors work with individuals, groups, couples, and families for the purpose of treating psychopathological conditions and optimizing human growth and development.

Two program options are available: a 48-credit Community Mental Health/Agency Counseling option and a 60-credit Clinical Mental Health Counseling option. The Community Mental Health/Agency Counseling option is designed to meet Wisconsin state credentialing requirements and will prepare students for the National Counselor Examination (NCE). The 60-credit Clinical Mental Health Counseling program option, in addition, allows the opportunity for students to develop specialized areas of training through various concentrations. These concentrations include: Alcohol and Drug Abuse Counseling; Career Counseling; Child and Adolescent Counseling; Eating Disorders; Gerontological Counseling; and Health Psychology Counseling

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.5, but less than 2.75. Both the Graduate School Application form (*obtainable from the Graduate School office*) and a Program Application form (*obtainable from the program director*) must be submitted by each applicant and include the documents identified on each form. Applicants must have presented and filed all required admissions documents by February 1 for summer and fall terms, and October 1 for the spring term. After committee review and a personal interview, notification of acceptance will be made by May 1 for summer and fall terms, and December 1 for the spring term. Students will be evaluated on the basis of academic performance, admissibility to the Graduate School, writing ability, level of experience in the human services field, letters of recommendation, personal interview, and subsequent rankings of a screening committee.

Requirements

The degree requires a minimum of 48 credit hours for the Community Mental Health/Agency Counseling Program Option and 60 credit hours for the Clinical Mental Health Counseling Program Option. Transfer credits may not exceed 16. A passing grade is required on the comprehensive examination taken near the end of the program. A master's research paper (*two credit Problems or six credit Thesis*) can be completed in lieu of the comprehensive examination. Students must be approved for degree candidacy at the appropriate time and follow an approved program plan, developed in conjunction with the program director. A minimum 3.0 grade point average must be maintained on all courses in the plan.

Community Mental Health/ Agency Counseling Program Option

48 credits

COUN-788	Counseling Process Laboratory	3
COUN-750	Counseling Theory	3
COUN-752	Group Dynamics	2
SPSY-753	Psychometric Theory and Application	2
COUN-715	Orientation to Mental Health Counseling	2
COUN-725	Social and Cultural Issues in Counseling	3
COUN-723	Psychopathology: Assessment and Treatment Planning	3
COUN-721	Alcohol and Drug Abuse Treatment Programs	3
HDFL-742	Human Development	2
HDFL-750	Systems of Marriage and Family Therapy	3
REHAB-683	Vocational Counseling Issues	2
COUN-754	Assessment Instruments in Mental Health Counseling	1
COUN-789	Cognitive- Behavioral Therapy	3
MFT-765	Research in Psychotherapy	3
COUN-794	Mental Health Counseling Internship	8
Electives	(courses may be selected with the approval of the program director)	5

Clinical Mental Health Counseling Program Option

60 credits

COUN-788	Counseling Process Laboratory	3
COUN-750	Counseling Theory	3
COUN-752	Group Dynamics	2
SPSY-753	Psychometric Theory and Application	2
COUN-715	Orientation to Mental Health Counseling	2
COUN-725	Social and Cultural Issues in Counseling	3
COUN-723	Psychopathology: Assessment and Treatment Planning	3
COUN-721	Alcohol and Drug Abuse Treatment Programs	3
HDFL-742	Human Development	2
HDFL-750	Systems of Marriage and Family Therapy	3
REHAB-683	Vocational Counseling Issues	2
COUN-754	Assessment Instruments in Mental Health Counseling	1
COUN-789	Cognitive- Behavioral Therapy	3
MFT-765	Research in Psychotherapy	3
COUN-794	Mental Health Counseling Internship	12
Electives	(courses may be selected with the approval of the program director)	13

Concentrations

Students in the 60-credit Clinical Mental Health Counseling program option may use a portion of their elective credits to develop a specialty area in one of the following concentrations:

Alcohol and Other Drug Abuse Counseling 9 credits

COUN-722	Advanced Topics in Substance Abuse Treatments	3
COUN-720	Psychopharmacology	2
PYSC-666	Alcohol and Family Systems Intervention	2
REHAB-533	Adolescent Substance Use and Abuse	2

Career Counseling 6 credits

SCOUN-787	Career Placement Services <i>or</i>	
REHAB-717	Occupational Analysis and Job Placement	2-3
EDUC-726	Administration	2-3

Child and Adolescent Counseling 11 credits

HDFL-703	Seminar in Child Development	3
SCOUN-705	Play Therapy	2
PSYC-552	Adolescent Psychology	3
COUN-761	Counseling Children and Adolescents	3

Child Emphasis 10 credits

HDFL-703	Seminar in Child Development	3
SCOUN-705	Play Therapy	2
SCOUN-647	Behavioral Problems in Children	2
COUN-761	Counseling Children and Adolescents	3

Adolescent Emphasis 10 credits

PSYC-552	Adolescent Psychology	3
COUN-761	Counseling Children and Adolescents	3
COUN-647	Assessment and Treatment of Eating Disorders	2
REHAB-533	Adolescent Substance Use and Abuse	2

Eating Disorders 9 credits

COUN-647	Assessment and Treatment of Eating Disorders	2
FN-560	Nutritional Counseling	3
PSYC-574	Psychology of Women	3
FN-XXX	Medical Nutrition Therapy for Eating Disorders <i>or</i>	
COUN-745	Treating Personality Disorders	1

Gerontological Counseling 6 credits

HDFL-540	Human Development-Aging Person	3
COUN-694	Counseling Older Persons	3

Health Psychology Counseling 13 credits

PSYC-771	Advanced Health Psychology	3
PSYC-781	Applied Health Psychology	4
PSYC-708	Psychosocial Interventions	3
PSYC-875	Psychoeducational Interventions	3

Marriage and Family Therapy

Dr. Bruce Kuehl, Program Director, 342A Vocational Rehabilitation Building, 715/232-2404

Introduction

Master of Science Degree The offerings are designed to develop specific competence in the following areas of marriage and family therapy: therapy services, consultation, coordination, referral, psychometric assessment and evaluation, ethics and related issues, and research design and procedures. This program is designed to prepare people for work in settings such as mental health clinics, family life agencies, hospitals, industry, schools and/or private practice. The core of the program is experientially and practically orientated. This program is fully accredited by the Committee on Accreditation for Marriage and Family Therapy Education (COAMFTE).

Learning experiences in the immediate professional setting include marriage and family therapy practicums based in clinic settings with live supervision.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.5, but less than 2.75. Applicants who have less than a 2.5 overall grade point average, but have relevant work experience since receiving the bachelor's degree and who are otherwise judged qualified as indicated below, may qualify for admission on a trial basis. This would require that they complete specified graduate courses within the first term of enrollment with a minimum grade point average of 3.0 in order to continue in the program.

It is recommended that the applicant have an undergraduate degree with major emphasis in one of the behavioral sciences or a closely related field. Applicants with deficiencies may be required to take additional undergraduate or graduate courses prior to attaining full status in the program. Students must complete the admissions process no later than February 22 of the year enrollment is planned. Both a Graduate School application form (*obtainable from the Graduate Office*) and program application forms (*obtainable from the office of the program director*) are required. Completion of the admission process means that all required admission documents must be in the Graduate Office and program admission documents must be in the program director's office prior to February 22.

When the number of students applying exceeds the number that can be accommodated, students will be admitted on the basis of academic performance and other factors appropriate for consideration including:

1. Work experience in a helping profession, i.e., counseling, social work, psychology, agency work, clergy and education.
2. Letters of recommendation from employers and consumers of services provided by the applicant. (*Request these forms from the program director.*)
3. Ratings of the individual as determined by a screening committee and process evaluation.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; admissions interview; applicant's goals; practicum evaluation; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of the 56-credit curriculum or demonstrated competence in the 56-credit curriculum with completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 28 credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Professional Requirements

ANTH-620	Anthropological Study of Family Systems	3
COUN-723	Psychopathology Assessment	3
HDFL-715	Theories of Family Process	2
HDFL-742	Lifespan Family and Human Development	2-3
HDFL-793	Marriage and Family Therapy Practicum I	4
HDFL-794	Marriage and Family Therapy Practicum II	4
MFT-740	Cultural Competence in Family Therapy	2
MFT-741	Research in Psychotherapy	3
MFT-653	Couples Therapy and Communication Training	3
MFT-666	Alcoholism and Family Systems Intervention	2
MFT-744	Psychometric Aids to Marriage and Family Therapy	2
MFT-750	Systems of Marital and Family Therapy	3
MFT-751	Seminar in Marriage and Family Therapy	3
MFT-755	Professional Issues in Marriage and Family Therapy	3
MFT-760	Sex Therapy Seminar	2
MFT-795	Marriage and Family Therapy Practicum	3
PSYC-793	Marriage and Family Therapy Practicum	4
PSYC-794	Marriage and Family Therapy Practicum	4

Electives

3 credits

XXX-XXX	Any approved electives	3
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Risk Control

Dr. Elbert Sorrell, Program Director, 125 Jarvis Hall – Science Wing, 715/232-2630

Introduction

Master of Science Degree This program is designed to prepare students for management positions in the field of occupational/industrial safety, health and environmental risk control through advisement, course work and applied research. The structure of the program focuses on meeting the professional and personal needs of the student.

The purpose of the program is to provide a comprehensive course of study in risk control management. The program has three components. The first two, safety engineering and industrial hygiene/environmental affairs, are technical in nature and are integrated with the third component, management/applied research, to provide a broad based technical/managerial perspective. Additional emphases in safety engineering and industrial hygiene/environmental affairs are also available.

Students completing the program are able to identify environmental, health and safety exposures posing risk to organizations and people. They are able to assist in control development, implementation and performance measurement, using group leadership techniques to ensure regulatory compliance and contribution to operational productivity through loss prevention/reduction.

Instructional efforts are directed to experiences that will provide students the capability to work effectively in their professional setting and to conduct applied research in various areas of risk control.

Applied learning experiences in the immediate professional setting include field problems and internships in risk control.

Admission

To be admitted to this program with full status, the applicant must hold a bachelor's degree from an accredited college with an overall grade point average of at least 3.0. Applicants with an overall grade point average ranging from 2.5 to 3.0 may be considered for probationary admission. In addition, the applicant must have appropriate academic preparation in a scientific, technical and/or related area. Professional, industrial/trade or educational experience is recommended prior to enrollment in the program.

A deficiency in these admission requirements does not preclude admission. It may require completion of additional undergraduate work and/or increase the amount of graduate credit required to earn the degree. An individual program of study will be designed by the program director to accommodate the requirements of the profession and the needs of the student.

Final student selection and admission to the program will be accomplished by the program director and the faculty of the Risk Control Center. Priority admission for the Fall semester will be done continuously through May. Late applications may be considered after this date. Priority admission for the Spring semester will be done continuously through November. Late applications may be considered after this date.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; applicant's goals; admissions interview; related work experience; program plan; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include (a) completion of at least 38 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of half of the credits must be in courses open only to graduate students – 700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Management/Applied Research

17-18 credits

RC-781	Risk Management in Loss Control	3
RC-782	Risk Control Management	3
RC-735	Field Problem in Risk Control	3
RC-785	Seminar in Risk Control	2

Select One:

RC-572	Behavioral Approach to Accident Prevention	3
INMGT-600	Organizational Leadership	3
INMGT-750	Organizational Development	3

Select One:

INMGT-700	Systems Analysis and Design	3
EDUC-740	Research Foundations	4

Selectives:

RC-784	Internship - Risk Control	2-4
INMGT-520	Quality Assurance	3
INMGT-525	Quality Management	3
TRHRD-560	Training Systems in Business and Industry	3

Safety Engineering

13 Credits

RC-583	Voluntary OSHA Compliance	3
RC-734	Safety Engineering Standards	2
RC-586	Fire Protection	3
RC-587	Human Factors Engineering/Ergonomics	3
RC-589	Fleet Risk Control Management	3
RC-592	Construction Risk Management	3

Safety Engineering Emphasis Electives

RC-787	Ergonomics Instrumentation	2
RC-571	Alcohol, Drugs and Accident Prevention	3
RC-588	Construction Safety	2
RC-590	Product/Service Liability	2
INMGT-530	Materials Handling	3

Industrial Hygiene/Environmental Affairs

8 Credits

CHEM-742	Industrial Hygiene	3
CHEM-652	Environmental Regulations Management	3
CHEM-710	Industrial Hygiene Instrumentation	2

Industrial Hygiene/ Environmental Affairs Emphasis Electives

RC-700	Semiconductor Risk Control	1
BIO-720	Toxicology and Radiation Biology	3
CHEM-553	Environmental Chemistry	3
CHEM-762	Industrial Hygiene Ventilation and Noise Control	3

School Psychology

Dr. Jacalyn Weissenburger, Program Director, 409 Education and Human Services Building, 715/232-1326

Introduction

Master of Science in Education The school psychology program provides students with specialized training in both psychology and education. School psychologists use their knowledge, training and skills to team with educators, parents and other mental health professionals. They work to maximize the learning of students and to promote the development of safe, healthy and enriching school environments.

There are two degree options within the school psychology program at UW-Stout. The Master of Science in Education degree (M.S.Ed.) course work occupies the first year of study, and the Education Specialist degree in school psychology (Ed.S.) is completed after the second year of study and a third year of internship. Following successful completion of both degrees, students are eligible for full certification by the Wisconsin Department of Public Instruction and the corresponding agency in most other states. Additionally, after completing both degrees, students are eligible for national certification by the National Association of School Psychologists (NASP).

The M.S.Ed. degree in school psychology is a 30-credit degree program. Students complete course work in psychometrics, counseling, assessment, diagnosis and psychoeducational disabilities. After satisfactorily completing 30 credit hours and a thesis, students are awarded the degree.

Degree Program Admission

To be admitted with full status to the program, the applicant must hold a bachelor's degree from an accredited college and have an overall undergraduate grade point average of 3.0 or better. A limited number of applicants may be admitted on probationary status if their overall grade point average is at least a 2.75.

Applicants should have an undergraduate degree with a major emphasis in one of the behavioral sciences or a closely related field. As part of the preparation for entry, a minimum of 15 credits in psychology and/or education are recommended. Course work necessary for sufficient preparation includes developmental psychology, abnormal psychology, personality, learning and statistics. An applicant with insufficient background may be required to take specific undergraduate courses in these areas in addition to those required within the graduate program.

The Graduate School Application form (*obtainable from the Graduate Office in Bowman Hall*), the Program Application form (*obtainable from the program director*), and their respective documents must be submitted by each applicant. Applicants must have presented and filed all required admission documents by January 15 prior to enrollment. After committee review, selected applicants will be invited for personal interviews. Following the committee's review, applicants will be notified of their status prior to April 15. If openings occur after this date, the program director and the committee may consider late applications.

Students will be admitted on the basis of academic performance, the recommendation of the Graduate School, and the rankings of the admission's committee. These rankings are based on:

1. Letters of recommendation from employers, faculty, and persons knowledgeable regarding the qualifications of the applicant.
2. The applicant's previous grade point average.
3. An interview in person (*or by telephone when restriction prohibits a personal interview*).
4. An autobiographical statement in which the applicant has outlined areas of interest, intent and professional goals.
5. A spontaneous writing sample completed by the applicant on the interview date.
6. Work or volunteer experience in the helping professions.

Education Specialist Degree Admission

Admission to the M.S. Ed. program in school psychology does not ensure admission to the Ed.S. program. Admission to the Ed.S. program requires an application to the Graduate School and the Ed. S. program.

Applicants to the Ed.S. program must have maintained at least a 3.25 graduate grade point average, and attained a grade of "B" or better in the following courses: Counseling Process Laboratory, Advanced Individual Mental Testing, Diagnosis and Remediation of Learning Disabilities, Learning Disabilities Laboratory, and Supervised Counseling Practicum. Further, an applicant must be considered a student in good standing, have demonstrated appropriate professional conduct as a graduate student, and have passed a background check conducted by the appropriate state or federal agency.

Practicing professionals who already possess a related master's degree may also wish to seek school psychology certification. Such individuals also must apply for admission to the Ed.S. degree in school psychology program.

Primary Evaluation Processes

The primary process used to evaluate a student's performance is a regularly scheduled review by the program committee of a student's course grades, research activities, practicum evaluations, and professional ethical/legal conduct. Program faculty convene once a semester to evaluate each student's progress. Degree candidacy is awarded to students who are in good standing, have fulfilled all Graduate School requirements for degree candidacy, and have fulfilled all school psychology program requirements for degree candidacy.

Requirements

The program outlined here includes all requirements for the M.S.Ed. and Ed.S. degrees in school psychology. Completion of the M.S.Ed. degree will require a minimum of 30 credits, completion of a Plan A or Plan B thesis, and the inclusion of all courses indicated in bold type. Credits earned toward the degree must meet a grade point average of 3.0 or better. A minimum of 15 credits must be at the 700 level. Application for degree candidacy must also be approved at the appropriate time.

All of the following courses are required for full certification as a school psychologist. The first 30 credits can be applied toward the M.S.Ed. degree. The remaining credits, internship, and Specialist Thesis can be applied toward the Ed.S. degree in school psychology after an applicant has been admitted into the Ed.S. program.

Degree Without Certification

Students who do not intend to work in the schools as a school psychologist but are interested in a related field (*where preparation emphasizing assessment, counseling, consultation, and disabilities is desirable*) may elect to complete the M.S.Ed. degree only.

Provisional Certificate or Licensure

A provisional certificate or licensure will be awarded to a student who has completed a master's degree and all remaining course work (*except the Internship and Specialist Thesis requirements of the Ed.S. degree*) by the Department of Public Instruction in Wisconsin or a corresponding agency in most states.

Core Professional Training

40 Credits

SPSY-753B	Laboratory – School Psychology	1
SPSY-743	Advanced Individual Mental Testing	3
SPSY-768	Diagnosis and Remediation of Learning Disabilities	2
SPSY-768A	Learning Disabilities Diagnosis and Remediation Laboratory .	1
SPSY-710	Psychoeducational Assessment of Young Children	2
SPSY-745	Assessment of Personality	2
SPSY-778	Psychoeducational Disability	3
SCOUN-760	Theories and Techniques of Behavior Modification	2
COUN-788	Counseling Process Laboratory	3
SPSY-775	School Consultation	2
SPSY-701	Seminar – School Psychology Services	2
SPSY-781	Field Practicum in Psychoeducational Services I	3
SPSY-782	Field Practicum in Psychoeducational Services II	3
SCOUN-705	Play Therapy	2
SCOUN-790	Supervised Secondary Counseling Practicum	3-6
COUN-752	Group Dynamics	2
SPSY-784	Clinical Practicum in Psychoeducational Services I	2
SPSY-785	Clinical Practicum in Psychoeducational Services II	2

Psychological Foundations

15-19 Credits

PSYC-850	Psychology of Development	3
PSYC-730	Advanced Psychology of Learning	2
COUN-675	Counseling Theory	3
SPSY-753	Psychometric Theory and Application	2
EDUC-740	Research Foundations	4
SPSY-735	Problems in School Psychology (<i>Plan B</i>) or	
SPSY-770	Thesis (<i>Plan A</i>)	2-6

Educational Foundations

8 Credits

SPED-630	Inclusion of Students with Exceptional Needs	3
SPSY-777	Legal and Ethical Issues for School Counselors and Psychologists	2
EDUC-536	Multiculturalism	2
EDUC-576	Cross-Cultural Field Experience	1

Education Specialist Degree Requirements

15-18 Credits

SPSY-792	Internship in School Psychology	6
SPSY-870	Specialist Thesis	3-6

Course work completed during the master's program is indicated in **bold**.

Training and Development

Introduction

Master of Science Degree This graduate program is intended for individuals employed in business and industry or the public sector who have a strong career interest in the field of training and development; area business people who wish to acquire credentials in the field of training and development; and individuals who have graduated with various undergraduate majors, including those who have completed a specialization in Training and Human Resource Development.

At the completion of this program, individuals will be able to manage and coordinate training and development programs; analyze training needs; design, deliver and evaluate training programs; and develop training competencies in managers and supervisory personnel.

This 30-credit program may be completed on either a full-time or part-time basis. The training and development program is designed to be completed in one calendar year (*two semesters and a summer session*) of full-time attendance.

Admission

To be admitted with full status to this program, applicants must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.5 but less than 2.75.

Entrance Requirements:

1. A completed bachelor's degree in a technical or business field or a field related to training and development.
2. Introductory courses in training and development and organizational leadership (*e.g. TRHRD-360/560 Training Systems in Business and Industry and INMGT-400/600 Organizational Leadership*) or equivalent work experience.
3. An introductory course in computer applications or equivalent computer experience.
4. Able to meet all requirements of the UW-Stout Graduate School.

A deficiency in these admission requirements may require completion of additional undergraduate courses, and/or an increase in the number of graduate credits required to earn the degree.

Primary Evaluation Processes

Processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following specific processes: applicant's goals; related work experience; program plan; student advisement; degree candidacy; and intent to graduate.

Requirements

Requirements for the degree include: (a) completion of at least 30 semester hours of approved graduate credits with an overall grade point average of 3.0 or better; a minimum of 15 credits must be in 700-level courses open only to graduate students; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as follows:

Required Research Preparation

7 credits

INMGT-700	Systems Analysis and Design	3
TRHRD-735	Field Problem in Training and Development	4

Required Professional Core Courses

18 credits

INMGT-750	Organizational Development	3
MEDIA-710	Learning Technologies	3
TRHRD-730	Training Design and Evaluation	3
TRHRD-740	Management and Coordination of Training and Development	3
TRHRD-746	Seminar in Training and Development	1
VTAE-534	Performance Analysis	3
PSYC-765	Psychology of the Adult Learner <i>or</i>	
PSYC-730	Advanced Psychology of Learning	2

Professional Selectives

5 credits

Choose courses related to training and development with the approval of the program director.

Degree Program Supervision

Before completing 9 credits, students will prepare a program plan in keeping with degree requirements and the student's special needs. At that time, the program director will suggest courses that will help the student meet employment goals.

Vocational Rehabilitation

Introduction

Master of Science Degree The Vocational Rehabilitation program is guided by its mission to prepare rehabilitation professionals who will assist and support individuals with disabilities during the rehabilitation process. Emphasis is given to the vocational, social, adjustment and independent living phase of rehabilitation. The program is designed to prepare personnel to assist individuals with disabilities to make and implement their own life choices so as to lead more satisfying lives. It emphasizes understanding vocational issues in order to use them as strategies to empower individuals with disabilities.

It is within the mission to provide programming for individuals preparing to enter professional-level rehabilitation positions as well as personnel currently employed but who wish to upgrade and maintain their professional skills. Four concentrations are currently available which (a) form a rehabilitation foundation; (b) provide opportunities for career advancement and development of leadership potential; and (c) provide a specialization within rehabilitation. These concentrations include rehabilitation counseling, rehabilitation leadership, vocational evaluation and school to work transition. At program completion, each student will (a) define the functional impacts of disabling conditions; (b) understand the process of coordinating community services to serve people who are disabled; (c) analyze jobs and career opportunities to assist in planning and/or developing rehabilitation services; (d) understand rehabilitation philosophy, trends and practices; and (e) apply research findings to improve services to people with disabilities. The goal of each concentration is to prepare rehabilitation professionals who have the knowledge, skills and experiences necessary to work effectively in the field. The concentration in rehabilitation counseling is accredited by the Council on Rehabilitation Education (CORE).

The master of science degree program in vocational rehabilitation is a 48-credit program. A maximum of six credits can be waived by the program director due to completion of equivalent graduate or undergraduate work with a grade of "B" or better. Both part-time and full-time students are accommodated through course scheduling, although the vocational evaluation concentration does require a one-semester, on-campus practical experience. Students may elect to complete more than one concentration by completing the prescribed course work. At least one elective is available for each student to pursue a personal interest area that will complement the established program. Each concentration includes learning experiences in professional settings as part of the 27-credit concentration. Students have the option to focus on a particular rehabilitation setting (*e.g., independent living, community-based programs, state agencies, proprietary agencies*).

Admission

A program-specific application (*obtained from the program director*) is required in addition to the Application for Admission to the Graduate School. In order to assure completion of the review process, the Graduate School and the vocational rehabilitation program applications, including all supporting documents, must be received six weeks prior to the start of the term for which admission is requested.

Entrance into the program requires the unanimous vote of approval by the Vocational Rehabilitation Admissions Committee. Approval will be dependent upon:

1. demonstrated potential for successful academic achievement at the graduate level;
2. interest in working with people with disabilities;
3. personal and social characteristics necessary to work with people with disabilities, such as personal and social maturity and a combination of patience, empathy and understanding;
4. ability to work independently;
5. ability to carry out professional responsibilities.

The decision for admission or denial of admission by the Vocational Rehabilitation Program Admissions Committee will be based on the criteria above with information obtained from records of undergraduate and/or other graduate academic attainment, letters of reference from a minimum of three persons who are familiar with the applicant in work or educational settings, information provided on the program application form, and other data and information received by the committee. The committee may require an interview in any case where information submitted is insufficient for rendering a decision.

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.5 but less than 2.75.

Students from a variety of educational backgrounds are eligible for admission. Applicants with degrees such as vocational rehabilitation, psychology, sociology, business, industrial technology, vocational education, special education, occupational therapy, physical therapy, communication disorders, recreational therapy and social work can find appropriate applications within the program. Although a specific educational background is not required, the applicant's transcripts will be evaluated to determine if deficiency work at the undergraduate level, or additional graduate work, will be required to earn a degree. Deficiency requirements may differ among the various concentrations.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; practicum evaluation; internship evaluation; degree candidacy; and intent to graduate.

Prior to the granting of degree candidacy, a preliminary oral examination is conducted by the Vocational Rehabilitation Program Retention Committee. The committee will evaluate (a) the acquisition of a knowledge base as identified in program and concentration objectives; (b) existence of interests, aptitudes and personality consistent with requirements for successful practice in rehabilitation; (c) demonstrated potential for successful practice in the field of rehabilitation; and (d) the meeting of all Graduate School requirements for degree candidacy. A copy of the committee procedures is available from the program director.

Requirements

The requirements for this degree include (a) completion of a minimum of 48 semester hours of graduate credit (a maximum of 6 credits may be waived, resulting in a 42-credit program); (b) an overall grade point average of 3.0 or better; (c) at least half of the credits must be in courses open only to graduate students-700 or 800 level; (d) a minimum grade of "B" or better in laboratory, practicum and internship courses; (e) approval for degree candidacy at the appropriate time; (f) completion of the professional core; and (g) a course distribution as outlined for the specific concentration.

Preparation in Research

3-10 credits

EDUC-740	Research Foundations <i>or</i>	
MFT-765	Research in Psychotherapy <i>or</i>	
PSYC-750	Principles of Program Evaluation <i>or</i>	
EDUC-742	Program Evaluation	3-4

Choose one of the following options:

REHAB-735	Problems in Vocational Rehabilitation <i>or</i>	
REHAB-770	Thesis in Vocational Rehabilitation	2-6

or

Comprehensive Exam: A student may choose to take a culminating comprehensive examination in lieu of completing a Plan B Problem or a Plan A Thesis.

Preparation Basic to Program

15 credits

REHAB-701	Foundations of Rehabilitation	3
REHAB-713	Aspects of Disability: Physical Disability	3
REHAB-714	Aspects of Disability: Cognitive Disability	3
REHAB-717	Occupational Analysis and Job Placement	3
REHAB-764	Case Coordination	3

Concentrations

Rehabilitation Counseling

27-30 credits

COUN-750	Counseling Theory	3
COUN-788	Counseling Process Lab <i>or</i>	
REHAB-708	Practicum in Rehabilitation Counseling	3
REHAB-620	Psychological Testing – People With Exceptional Needs	3
REHAB-723	Procedures of Vocational Evaluation	3
REHAB-783	Internship in Vocational Evaluation	6
REHAB-787	Internship in Rehabilitation Counseling	6
XXX-XXX	Approved Electives	3-6

Rehabilitation Leadership

27-30 credits

INMG-630	Employee Involvement and Work Teams	3
INMG-600	Organizational Leadership	3
PSYC-685	Recruitment and Selection of Human Resources	3
REHAB-602	Management of Nonprofit Organizations	3
REHAB-705	Practicum in Rehabilitation Leadership	3
REHAB-780	Administration in Vocational Rehabilitation <i>or</i>	
REHAB-688	Developing Collaborative Partnerships	2-3
REHAB-785	Internship – Rehabilitation Leadership	6
XXX-XXX	Approved Electives	4-7

Vocational Evaluation

27-30 credits

COUN-750	Counseling Theory	3
REHAB-620	Psychological Testing – People With Exceptional Needs	3
REHAB-670	Work Adjustment Services	3
REHAB-707	Practicum in Vocational Evaluation	4
REHAB-723	Procedures of Vocational Evaluation	3
REHAB-724	Laboratory in Vocational Evaluation	3
REHAB-783	Internship in Vocational Evaluation	6
XXX-XXX	Approved Electives	2-5

School to Work Transition

25-27 credits

CTE-502	Principles of Career/Technical Education	2
CTE-560	Coop Occupational Education Program	2
SCOUN-733	Career Development Process and Issues	3
EDUC-742	Program Evaluation	3
SPED-524	Curr and Inst: Career and Transition Education	3
SPED-528	Assessment for IEP/ITP	3
REHAB-688	Developing Collaborative Partnerships	2
REHAB-670	Work Adjustment Services	3
REHAB-723	Procedures of Vocational Evaluation	3
REHAB-798	Field Experience <i>or</i>	
REHAB-749	Coop Education Experience	1-12
XXX-XXX	Approved Electives	1-4

Other Requirements and Program Policies

1. Degree Without Concentration

Students applying to the master of science program in Vocational Rehabilitation without a specific concentration are required to submit their personal program objectives as part of the program application process. These will be used to determine if the program will be beneficial in helping students reach their objective and as an aid in developing the individual's program plan.

2. Program Policy for Waived Credits

A maximum of six credits can be waived by the program director due to completion of equivalent graduate or undergraduate work with a grade of "B" or better.

3. Program Policy for Electives

Elective course work must contribute to the objectives of the program and needs of its students.

4. Deficiency Course Work and Additional Admission

Requirement for the Rehabilitation Leadership Concentration

Undergraduate deficiency course work is required for the Rehabilitation Leadership concentration. The student is required to have course work in accounting, finance and marketing. A minimum of two years of paid work experience in rehabilitation services or in an administrative position is required of applicants to the Rehabilitation Leadership concentration.

5. Teaching Certification in the

School to Work Transition Concentration

Additional courses may be taken for a teaching certificate in the School to Work Transition concentration. Some school districts prefer a certified or licensed teacher, depending on the state in which one works. A teaching certificate is recommended in the state of Wisconsin.

Sixty Credit Program

With the advice and approval of the program director, students wishing to complete a 60-credit M.S. in Vocational Rehabilitation will identify appropriate coursework that develops an emphasis that meets the students' goals.

Specializations

Introduction

Specializations are programs of study, with carefully constructed learning goals and experiences, and evaluation procedures. While course work may be included in a specialization, students may also work to meet learning goals through internships, working with a mentor, successfully completing a proficiency examination or certification examination, or other non-classroom experiences. Courses may come from several departments and involve faculty from several disciplines.

Courses taken to complete a specialization may also fit elsewhere in a student's program of study.

Students who complete a specialization will have the specialization recorded on their transcript and will receive a certificate of completion.

Disability Accommodation in Business and Industry

This specialization will provide participants with the skills to work effectively within business and industry settings to maximize gainful employment opportunities and productivity for persons with disabilities. Participants will be able to develop, implement and evaluate

disability initiatives and policies, and understand the need to work effectively at all levels of business and industry in order to provide optimal accommodations for persons with disabilities.

Requirements for the Specialization

Intended Outcome	Learning Activity	Evaluation
Students will be able to:	The following courses (22 credits) are required. Alternative means of demonstrating competencies will be reviewed by faculty.	
1. Identify principles and concepts of organizational structure, leadership styles, and corporate culture that impact the employment of people with disabilities in business and industry.	INMGT-400/600 Organizational Leadership 3 REHAB-462/662 Management of Employees with Disabilities 3 PSYC-382/582 Human Resource Management 3	Students must achieve a "C" or better in all required courses to become specialized.
2. Describe the roles of a rehabilitation professional when providing employer-based disability services, which includes working at all levels of business and industry from a team perspective.	REHAB-360/560 Assistive Technology 2 REHAB-462/662 Management of Employees with Disabilities 3 REHAB-460/660 Rehabilitation in the Private Sector 3	*Employer Analysis In order to develop an understanding of business and industry and the roles of a rehabilitation professional who provides disability services in business and industry, an integral component of the specialization is an in vivo exposure to a business environment that will provide an internal perspective. The student/employer interaction will be culminated by an APA style paper to include a general overview of the company, a review of the company's experience with disability, an analysis of policies and procedures specific to disability related problems and risks, a review of previous interactions with rehabilitation professionals and consultants, identification of the primary barriers to cost containment and facilitating effective management of disabilities, and recommendations for future service delivery emphasizing the potential role(s) of the rehabilitation professional. Evaluation for the employer analysis exercise: oral presentation and faculty review of and approval of the final report.
3. Demonstrate attitudes and skills needed to solve unique problems of workers with disabilities, including the issues of return-to-work.	REHAB-360/560 Assistive Technology 2 REHAB-462/662 Management of Employees with Disabilities 3 REHAB-460/660 Rehabilitation in the Private Sector 3 REHAB-7XX Field Study or REHAB-480 Advanced Practicum or REHAB-XXX Cooperative Education 2*	
4. Recognize the need to address the concerns, needs, and fears of employers in hiring and employing people with disabilities.	RC-387/587 Human Factors Engineering/Ergonomics 3 REHAB-462/662 Management of Employees with Disabilities 3 REHAB-460/660 Rehabilitation in the Private Sector 3 REHAB-7XX Field Study or REHAB-480 Advanced Practicum or REHAB-XXX Cooperative Education 2* PSYC-382/582 Human Resource Management 3	
5. Demonstrate the principles of cost containment in disability management including workplace safety, ergonomics, employee assistance programs, and disability prevention.	RC-381/581 Principles of Occupational Safety and Loss 3 RC-387/587 Human Factors Engineering/Ergonomics 3 REHAB-462/662 Management of Employees with Disabilities 3 REHAB-7XX Field Study or REHAB-480 Advanced Practicum or REHAB-XXX Cooperative Education 2*	
6. Explain pertinent laws and legislative initiatives as well as relevant insurance regulations and their impact on business and industry.	REHAB-462/662 Management of Employees with Disabilities 3 REHAB-460/660 Rehabilitation in the Private Sector 3	
7. Analyze company's policies and procedures specific to disability-related problems and risks including identification of the primary barriers to cost containment.	REHAB-7XX Field Study or REHAB-480 Advanced Practicum or REHAB-XXX Cooperative Education 2*	

Gerontology

The populations of the United States and the world are growing older, precipitating important changes in health and social policies. At present, one in eight Americans are 65 or older. These growing numbers will increase demand for individuals with gerontological skills and knowledge. The Gerontology specialization requires 20 credits, or

equivalent, and includes a required core and practicum through which students study aging as an interactive process of physical, social and psychological forces. Two credits of field experience with aging-related content will be required in the student's own major area of study.

Requirements for the Specialization

Intended Outcome	Learning Activity	Evaluation
The following outcomes will be achieved through required courses:		
1. Identify major biological theories of aging.	BIO-125 Biology of Aging 3	Exam, papers, reports 2.0 grade point average
2. Identify and describe the biological changes associated with aging.		
3. Recognize normal and pathological changes that occur in organ systems with age.	HDFL-340/540 Human Development: Aging Person 3 BIO-125 Biology of Aging 3	Exam, papers, reports 2.0 grade point average
4. Comprehend the social, political and economic aspects of aging.	HDFL-340/540 Human Development: Aging Person 3	Exam, papers, reports 2.0 grade point average
5. Recognize and discard stereotypes associated with aging.		
6. Work in direct or indirect service to the older population.	Field Experience	Evaluation of field experience
The following outcomes may be achieved through the student's selection of elective courses:		
7. Understand lifespan concept of development and demonstrate an integrated knowledge of the aging individual within the context of family.	HDFL-255 Lifespan Human Development 3	Exam, papers, reports 2.0 grade point average
8. Understand the reciprocal nature of family caregiving.	HDFL-341/541 Family Caregiving to Dependent Elders 1	Exam, papers, reports 2.0 grade point average
9. Understand the process of grief for older adults.	HDFL-332/532 Death and Bereavement in the Family 3	Exam, papers, reports 2.0 grade point average
10. Recognize personal and cultural attitudes toward death.	HDFL-332/532 Death and Bereavement in the Family 3	Exam, papers, reports 2.0 grade point average
11. Identify and understand the ethical issues related to health care for the elderly.	HDFL-345/545 Health Care Dilemmas and Decisions for Families 2	Exam, papers, reports 2.0 grade point average
12. Demonstrate ability to plan and develop nutritious meals and programs for older individuals which take into account physical and financial limitations.	FN-405/605 Nutrition for the Aged 2	Exam, papers, reports 2.0 grade point average
13. Assist aging individuals, especially those with physical limitations, to find suitable and aesthetically pleasing clothing. Understand the product needs of older consumers and the promotional strategies used to market to this population.	BURL-335/535 Topics: Minorities and Aging Consumers 2	Exam, papers, reports 2.0 grade point average
14. Understand counseling approaches and techniques for working with aging families in order to construct models for counseling older individuals and their families.	COUN-494/694 Counseling the Older Person 2-3	Exam, papers, reports 2.0 grade point average
15. Assist older individuals and their families with financial planning.	HT-488 Financial Planning for Retirement 2	Exam, papers, reports 2.0 grade point average
16. Identify the effects of exercise upon an older individual.	HLTH-365 Physiology of Exercise 3	Exam, papers, reports 2.0 grade point average
17. Explain the psychological and physiological dimensions and impact of disability from a developmental perspective.	BIO-220 Physiology of Disabilities 3 REHAB-230 Psychosocial Aspects of Disability 3 REHAB-682 Sexuality and Disability 2	Exam, papers, reports 2.0 grade point average
18. Identify needs and difficulties unique to older disabled workers.	REHAB-355/555 Rehabilitation of the Older Disabled Worker 2	Exam, papers, reports 2.0 grade point average
19. Identify formal support systems available to older persons with special needs or national, state and local needs.	REHAB-458/658 Rehabilitation Support System Networking 2	Exam, papers, reports 2.0 grade point average
20. Explain various understandings of the meaning of aging as portrayed in literature.	LIT-450 Aging in Literature 3	Exam, papers, reports 2.0 grade point average
21. Identify architectural barriers confronted by the disabled traveler.	HT-360/560 Hospitality and the Handicapped Traveler 1	Exam, papers, reports 2.0 grade point average
22. Understand the range of technological options available to assist frail and/or disabled elderly.	REHAB-360/560 Assistive Technology 2	Exam, papers, reports 2.0 grade point average
23. Identify and describe absorption and metabolism of medications in the elderly.	BIO-358 Introduction to Pharmacology 2	Exam, papers, reports 2.0 grade point average

Postgraduate Dietetic Internship

The postgraduate dietetic internship is a 26 credit, postgraduate program for graduate degreed persons seeking enrollment in an accredited supervised practice experience to gain eligibility for the Commission on Dietetic Registration credentialing examination, leading to Registered Dietitian (RD) status. Admission requires completion of a post-baccalaureate degree from an accredited university and verification of completion of a dietetic program approved by the Commission of Accreditation/Approval of Dietetics Education. The Postgraduate Dietetic Internship specialization is completed in two phases. Phase 1 is a 16-week semester of coursework. Courses must be completed with a grade of B or better to begin Phase 2, the 37-week Supervised Practice component.

Although a job market exists for all persons with training in food and nutrition, employment prospects in nutrition are best for those credentialed as a registered dietitian with the American Dietetic Association, especially when the position relates to patient care and counseling or education. Persons seeking a supervised practice experience after a graduate degree represent a more mature population than bachelor degreed students. The learning experiences of the internship will allow the student to build upon skills, knowledge, and expertise acquired through postgraduate work experience and/or education.

Intended Outcome	Learning Activity	Evaluation
1. Utilizes effective oral and written communication skills in the practice of dietetics.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , NCSE ⁴ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
2. Promotes effective interpersonal relationships in the practice of dietetics.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , NCSE ⁴ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
3. Provides education to consumers, clients, other professionals and support personnel.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , NTSE ³ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
4. Utilizes computer and other technologies in the practice of dietetics.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , NTSE ³ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
5. Applies current research information in the practice of dietetics.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
6. Participates in design and evaluation of quality management programs.	Luther Hospital and Lakeview Medical Ctr., all food service management rotations. FN-712 Practicum in Community Nutrition 1-2	Tutorial participation ¹ , SATPHN ² , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
7. Utilizes knowledge of legislative processes.	Eau Claire Area Schools, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
8. Complies with the Code of Ethics and Standards of Practice for the Profession of Dietetics.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , Self-Evaluation, performance evaluation. Classes: projects, exams, reports, grade 3.0 minimum, intern evaluates preceptors/internship.
9. Provides nutrition care for individuals and groups of all ages through systematic screening, assessment, planning, intervention, evaluation and documentation.	All clinical rotations, community rotation. FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.

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Intended Outcome	Learning Activity	Evaluation
10. Provides nutrition counseling and education to individuals and groups for health promotion, maintenance, treatment and rehabilitation	All clinical rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , NCSE ⁴ , performance evaluation, portfolio. Classes: projects, exams, reports, grade 3.0 minimum.
11. Participates in the management of cost effective nutrition care.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , portfolio, performance evaluation, Classes: projects, exams, reports, grade 3.0 minimum.
12. Utilizes food, nutrition and social service resources in community programs.	All clinical rotations, community rotation. FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , portfolio, performance evaluation. Classes: projects, exams, reports, grade 3.0 minimum.
13. Assures that food service operations meet the food and nutrition needs of target markets.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 1-2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , NTSE ³ , performance evaluation, portfolio, site abstract. Classes: projects, exams, reports, grade 3.0 minimum.
14. Utilizes menus as focal points for control of the food service system.	All food service management rotations, community rotation. FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , portfolio, performance evaluation, seminar projects.
15. Participates in the management of food service systems including procurement, food production, distribution and service.	All food service management rotations. FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , portfolio, performance evaluation, seminar projects.
16. Participates in the management of human, financial, material, physical and environmental resources.	All food service management rotations, community rotation. FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , portfolio, performance evaluation, seminar projects.
17. Integrates food and nutrition services with other services in the practice.	All clinical rotations, community rotation.	Tutorial participation ¹ , SATPHN ² , NTSE ³ , portfolio, performance evaluation.
18. Participates in activities that promote improved nutrition status of consumers and market the profession of dietetics.	All clinical rotations, all food service management rotations, community rotation. FN-606 Nutrition Education 3 FN-710 Clinical Nutrition 3 FN-712 Practicum in Community Nutrition 2 FN-865 Supervised Practice in Medical Nutrition 3-14	Tutorial participation ¹ , SATPHN ² , portfolio, performance evaluation. Classes: projects, exams, reports, grade 3.0 minimum.

¹ Tutorial participation encompasses the following: intern has observed and/or performed task(s), been evaluated by preceptor, been given verbal feedback from preceptor regarding performance and compared to performance requirements for entry-level dietitian.

² Self-Assessment Tool for Public Health Nutritionists, a tool developed by the Public Health Nutrition Practice Group.

³ Nutrition Therapy Skills Evaluation measures nutritional assessment skills.

⁴ Nutrition Counseling/Education Skills Evaluation measures counseling/interviewing skills.

Training and Human Resource Development

Education is not the sole province of schools. Programs of instruction are conducted by many businesses, industries, in the military, and by other groups and organizations. Planning and providing this instruction is the province of professionals usually identified as "trainers." In our technological society, training programs have become increasingly complex and demands on trainers have increased. Greater expertise on their part is required. This all-university specialization addresses needs for

preservice and in-service education for trainers.

This program is intended for students who have expertise in areas such as engineering, technology, education, business, government, military and labor, and who desire to become involved in development and implementation of training programs. Contact the Office of the Dean, College of Technology, Engineering and Management for further information.

Requirements for the Specialization

Note: Courses numbered 700 and greater are open to graduate students only.

Intended Outcome	Learning Activity	Evaluation
1. Introduction to concepts of training and human resource development.	TRHRD-360/560 Training Systems in Business and Industry 3 Select one of the following: INMG-400/600 Organizational Leadership or PSYC-382/582 Human Resource Management 3	Successful completion of courses at left (6 credits).
2. Design and develop training activities.	MEDIA-360/560 Introduction to Media in Education and Training 2 Complete a course from the appropriate school in curriculum development or course construction (2-3 credits) such as: EDUC-312/512 Introduction to Curriculum, Methods and Assessment 2 MEBE-401 Marketing Education Curriculum 2-3 VTAE-438/638 Course Construction for Vocational Educators 2	Successful completion of courses at left (minimum 4 credits).
3. Implement and facilitate training activities.	Select one of the following: EDUC-312/512 Introduction to Curriculum, Methods and Assessment 2 MEBE-301 Marketing Education Methods 3-4 TRHRD-370/570 Training Methods in Business and Industry 2 VTAE-405/605 Methods of Teaching Vocational Education 2	Successful completion of a course at left (minimum 2 credits).
4. Evaluate the effectiveness of training activities.	VTAE-440/640 Instructional Evaluation in Vocational Education 2	Successful completion of the course at left (2 credits).
5. Apply concepts of training in the professional area.	TRHRD-XXX Co-op/Internship in Training 1-8	Successful completion of the contractual agreement of the internship as evaluated by the business, industry, government or military supervisor, and the UW-Stout supervisor. Completion of a field report is required.

Vocational Evaluation/Rehabilitation Technology

The impact of technology has changed assessment and service delivery in the field of rehabilitation. A philosophical shift to a more empowering stance with persons with disabilities has occurred as a result of the evaluation of their skills and abilities and the enhancement of those skills through assistive technology. This specialization educates and

trains vocational rehabilitation professionals and students in skills to meet the needs of people with disabilities, and to provide the services that are being demanded by employers, as well as persons with disabilities for use in the labor market and in accordance with the Americans with Disabilities Act.

Requirements for the Specialization

Intended Outcome	Learning Activity	Evaluation
Development of tool modification and accommodation: demonstrate familiarity with and use of testing accommodations or modifications to facilitate the vocational exploration of persons with disabilities through the modification of tests, work samples, job sites and training materials, as appropriate.	"The Use of Assistive Technology" workshop, resulting in a report detailing the use and modification of testing strategies <i>or</i> REHAB-360/560 Assistive Technology 2	Faculty review and approval of report on use and modification of evaluation tools <i>or</i> Grade of "C" or better
Communication of rehabilitation plan objectives and recommendations: demonstrate the ability to incorporate the potential of assistive technology to enhance performance potential in the vocational choices of persons with disabilities.	"The Use of Assistive Technology" workshop, resulting in reports that include recommendations for the use of assistive technology <i>or</i> REHAB-360/560 Assistive Technology 2	Faculty review and approval of report on use and modification of evaluation tools <i>or</i> Grade of "C" or better
Vocational rehabilitation process and philosophy: outline and describe philosophical movements associated with vocational rehabilitation in the United States, describe the role of vocational rehabilitation/assessment in a diverse cultural environment, and describe the need that persons with disabilities have to be a part of society, focusing on strengths and assets that people bring with them to any situation.	Research paper describing process and philosophy <i>or</i> Demonstrated work experience of three or more years and professional development credentials <i>or</i> REHAB-101 Introduction to Rehabilitation 3	Faculty review and approval of research paper <i>or</i> work experience and professional credentials <i>or</i> Grade of "C" or better
Occupational Information: find and use various sources of national, state and local occupational information; link rehabilitation recommendations to the local labor market of the person being served.	Demonstrate work experience as a job developer or placement specialist of two or more years <i>or</i> "Job Development and Placement and Occupational Information" workshop resulting in appropriate work recommendations in a written report <i>or</i> REHAB-310 Vocational Evaluation <i>or</i> REHAB-410 Job Placement 3	Faculty review of work experience <i>or</i> faculty review and approval of report recommendations <i>or</i> Grade of "C" or better
Functional aspects of disability: develop knowledge of the functional characteristics of disability and understand the impact of evaluating the skill and abilities of a person with a disability.	Research paper on effect of disabling condition(s) in vocational rehabilitation <i>or</i> Test out with faculty-developed standardized test <i>or</i> REHAB-230 Psychosocial Aspects of Disability 3	Faculty review and approval of research paper <i>or</i> 80 percent or better on the standardized test <i>or</i> Grade of "C" or better
Individualized vocational rehabilitation/evaluation planning: identify and delineate the individual needs of a person with a disability; state those needs in a plan for testing skills and abilities in relation to the accomplishment of a task or goal.	"Rehabilitation Planning" workshop resulting in written vocational rehabilitation plan <i>or</i> Work experience of two or more years, one letter of reference from a supervisor, three letters of reference from professional referral sources, and five letters of reference from consumers of services <i>or</i> REHAB-310 Vocational Evaluation 3	Faculty review and approval of written rehabilitation plan of three separate case studies provided during workshop <i>or</i> Faculty review and approval of work experience and letters of reference <i>or</i> Grade of "C" or better
Vocational interviewing: demonstrate the development of rapport, provision of agency and assessment information, initial identification of client strengths and limitations through the vocational interview; and create an understanding of the process of vocational rehabilitation through the vocational interview.	"Vocational Interviewing and Facilitating Career Decision Making with Clients" workshop resulting in the videotaping of a vocational interview <i>or</i> Demonstrate evidence of past work experience as a vocational counselor for two or more years <i>or</i> Complete college level course work in vocational interviewing	Faculty review and approval of videotaped vocational interview <i>or</i> Faculty review and approval of work experience <i>or</i> Faculty review and approval of college level course work
Vocational report development and communication: interpret, analyze, and synthesize participant data in a coherent and concise manner that addresses needs, strengths, and assets of the participant and develops pertinent recommendations through a report shared orally and in writing with the participant/client and referral source/rehabilitation counselor.	"Vocational Rehabilitation Report Development and Communication" workshop <i>or</i> Four written reports addressing needs of four case studies presented during the workshop <i>or</i> REHAB-310 Vocational Evaluation 3	Faculty review and approval of the written report options and letters of reference <i>or</i> Grade of "C" or better

Intended Outcome	Learning Activity	Evaluation
Standardized testing: become familiar with the procedures for administering and interpreting standardized tests and application of tests to persons with disabilities, understand the impact of the disabling condition and the use of the most appropriate test, and develop a report explaining the impact of testing and using results with a vocational rehabilitation report.	Previous college course work in the use of psychometric testing and principles of validity and reliability <i>or</i> “Standardized Testing” workshop and paper describing use of standardized tests with persons with disabilities <i>or</i> Past work experience of two years or more where responsibilities include administering and interpreting standardized tests with a supervisor’s letter and at least one referral source/rehabilitation counselor <i>or</i> REHAB-420/620 Psychological Testing – People with Exceptional Need 3	Faculty review and approval of previous course work <i>or</i> Faculty review and approval of workshop paper <i>or</i> Faculty review and approval of work experience and letters of recommendation <i>or</i> Grade of “C” or better
Job and Training Analysis: perform a job analysis and develop a training analysis on a given job and do a written report; use the job analysis to determine the most appropriate evaluation tools to use with a person with a disability to measure performance ability; determine appropriate training or education to prepare for the job.	Read <i>A Guide to Job Analysis</i> or <i>The Revised Handbook for Analyzing Jobs</i> , participate in an online discussion of the materials and procedures of job analysis, select a job in the community that reflects occupational choices of agency participants, prepare a job analysis report, select and describe evaluation tools most appropriate for someone interested in the occupation <i>or</i> REHAB-410 Job Placement 3	Faculty review and approval of the job and training analysis report and online discussion <i>or</i> Grade of “C” or better
Functional Skills: use appropriate tools and strategies to evaluate the functional daily living skills of an individual with a disability, select appropriate method to determine level of functional skill, develop and use situational assessment to establish an understanding of the individual functional skills of a person with a disability.	“Functional Skills Assessment” workshop and report <i>or</i> Demonstrate evidence of past work experience of two or more years involving vocational evaluation/ functional skills assessment and/or situational assessment with two letters of reference from referral sources <i>or</i> REHAB-470/670 Work Adjustment Services 3	Faculty review and approval of report <i>or</i> Faculty review and approval of work experience and letters of reference <i>or</i> Grade of “C” or better
Assessment of Learning: demonstrate awareness of learning styles and modalities of teaching through use of selected tests, modify test administration to the demands of the learning/teaching situation.	Previous college-level course work in educational psychology, special education, adult or vocational education that address issues of learning and learning styles and use of learning assessments <i>or</i> Paper describing learning styles and assessment of such styles, with assessment tool selection and modification	Faculty review and approval of course work <i>or</i> Faculty review and approval of paper
Work samples and work sample systems: demonstrate appropriate use of work samples and work sample systems as means of assessment within a given occupation, demonstrate appropriate use of work samples and systems with different types of disabling conditions.	“Work Sample and Work Sample Systems” workshop and research paper <i>or</i> REHAB-310 Vocational Evaluation 3	Faculty review and approval of research paper <i>or</i> Grade of “C” or better
Behavioral Observation: observe and note behaviors of individuals during the assessment process as asset or limitation behaviors in relation to the accomplishment of a target goal.	Read appropriate, assigned material and develop a written behavior observation of five clients where observations were critiqued by at least two other professionals, including the referring counselor <i>or</i> Demonstrate evidence of work experience in vocational rehabilitation/evaluation where duties included writing and/or noting behavioral observations, with a letter from a supervisor and two from referral sources attesting to accuracy and usability of the written behavioral observations, including examples of written behavioral observations	Faculty review and approval of observations, critiques and reports <i>or</i> Faculty review and approval of work experience, letters of reference, and examples of written behavioral observations

Professional Development Certificates

Introduction

UW-Stout offers "professional development certificate" programs in addition to its traditional majors and minors to meet the needs of those who wish to obtain additional knowledge and skills needed for personal growth and professional advancement.

While not a substitute for a degree or diploma, the certificate is an alternative credential for individuals seeking to obtain new knowledge and skills or to update their knowledge and skills in a specific area. Typically, a certificate is earned by completing a set of limited, well defined learning outcomes focused on new or emerging processes or new knowledge and principles applied to practical problems or issues.

These course sets lead to a certificate only. If you're interested in a Master's or Education Specialist degree, please refer to the degree programs found elsewhere in this bulletin.

Cisco Certified Network Associate Exam Preparation Certificate

The Cisco Certified Network Associate (CCNA) Exam Preparation Certificate prepares students to pass examinations through the use of lecture, online curriculum, and laboratory exercises. In order to earn the certificate, students must pass the following courses and professional exams:

TCS-131	Network operating System Fundamentals	2
TCS-141	Networking Fundamentals I	2
TCS-142	Networking Fundamentals II	2
TCS-143	Networking Fundamentals III	2
TCS-144	Networking Fundamentals IV	2
Exam: Cisco CCNA		

For more information: Steve Schlough, schloughs@uwstout.edu , 715/232-1484

Cisco Certified Design Associate Exam Preparation Certificate

The Cisco Certified Design Associate (CCDA) Exam Preparation Certificate prepares students to pass examinations through the use of lecture, online curriculum, and laboratory exercises. In order to earn the certificate, students must pass the following courses and professional exams:

TCS-131	Network operating System Fundamentals	2
TCS-141	Networking Fundamentals I	2
TCS-142	Networking Fundamentals II	2
TCS-143	Networking Fundamentals III	2
TCS-144	Networking Fundamentals IV	2
Exam: Cisco CCNA		
TCS-382/582	Network System Design	3
Exam: Cisco DCN		

For more information: Steve Schlough, schloughs@uwstout.edu , 715/232-1484

Cisco Certified Network Professional Exam Preparation Certificate

The Cisco Certified Network Professional (CCNP) Exam Preparation Certificate prepares students to pass examinations through the use of lecture, online curriculum, and laboratory exercises. In order to earn the certificate, students must pass the following courses and professional exams:

TCS-441/641	Scalable Internetworks	3
Exam: Cisco Routing		
TCS-442/642	Remote Access Networks	3
Exam: Cisco Remote Access		
TCS-443/643	Multi-Layer Switched Networks	3
Exam: Cisco Switching		
TCS-444/644	Internetwork Troubleshooting	3
Exam: Cisco Support		

For more information: Steve Schlough, schloughs@uwstout.edu , 715/232-1484

Cisco Certified Design Professional Exam Preparation Certificate

The Cisco Certified Design Professional (CCDP) Exam Preparation Certificate prepares students to pass examinations through the use of lecture, online curriculum, and laboratory exercises. In order to earn the certificate, students must pass the following courses and professional exams:

TCS-441/641	Scalable Internetworks	3
Exam: Cisco Routing		
TCS-442/642	Remote Access Networks	3
Exam: Cisco Remote Access		
TCS-443/643	Multi-Layer Switched Networks	3
Exam: Cisco Switching		
TCS-445/645	Internetwork Design	3
Exam: Cisco Design		

For more information: Steve Schlough, schloughs@uwstout.edu , 715/232-1484

Foundations in Hospitality and Tourism

The Foundations in Hospitality and Tourism is a graduate-level certificate designed to introduce key management foundations for operations and services administration. The certificate will serve those individuals employed within industry who seek advanced techniques that can be directly applied toward the working environment. The 12-credit certificate includes the following courses:

HT-700	Issues in Hospitality and Tourism	3
HT-701	Hospitality and Tourism Research Interpretations	3
HT-754	Managing Technology in Hospitality	3
HT-755	Leadership in Service Industries	3

For information: Robert Davies, daviesb@uwstout.edu, 715/232-1480

Gaming Management

The professional development certificate in Gaming Management will provide gaming personnel, graduate and undergraduate students, and international audiences with an understanding of the operational and management aspects of casino gaming while addressing the historical, legal, economic, social, psychological, and tourism impacts that gaming entertainment has on communities and societies.

HT-315/515	Gaming Management	3
HT-316/516	Casino Operations Management	3
HT-317/517	Psychosocial Issues in Gaming	3
HT-418/618	Casino Tourism	3

For information: Sharon Giroux, girouxs@uwstout.edu, 715/232-2089

Human Resource Management

The Human Resource Management certificate program provides a broad base of knowledge to professionals seeking to expand their management competencies. The coursework is essential to prepare for the Professional Human Resource (PHR) exam, developed by the Society for Human Resource Management (SHRM) and recognized nationally as a significant credential for professional advancement in human resources. Competencies required by human resources professionals are best defined by content of the SHRM examination, and they are the same competencies covered in the coursework required for the certificate. The certificate in no way implies or guarantees that the student will pass the exam but should be seen as an important professional accomplishment.

The following courses provide the student with knowledge in all of the tested areas:

PSYC-381/581	Industrial Psychology	2
PSYC-382/582	Human Resource Management	3
PSYC-403/603	Management of Employee Reward Systems	3
PSYC-485/685	Recruitment and Selection of human Resources	3
TRHRD-360/560	Training Systems in Business and Industry	3
ECON-421/621	Collective Bargaining and Labor Relations	2
RC-381/581	Occupational Safety/Loss Control	2-3

For more information: Mitchell Sherman, shermanm@uwstout.edu, 715/232-2658

Service Administration

The Service Administration is a graduate-level certificate designed to address operational issues in tangible and intangible services administration. The certificate will serve those individuals employed within industry who seek advanced techniques that can be directly applied toward the working environment. The 12-credit certificate includes the following courses:

SRVM-554	Services Marketing Management	3
SRVM-610	Electronic Service Management	3
SRVM-620	International Service Concepts	3
SRVM-621	Customer Interaction Center Management <i>or</i>	
HT-747	Seminar in Hospitality Management	3

For information: Robert Davies, daviesb@uwstout.edu, 715/232-1480

Strategic Management in Hospitality

The Strategic Management in Hospitality is a graduate-level certificate designed to address strategic positioning for hospitality operations and services administration. The certificate will serve those individuals employed within industry who seek advanced techniques that can be directly applied toward their working environment. The 12-credit certificate includes the following courses:

HT-751	Strategic Management in Hospitality	3
HT-753	Managing Finance in the Hospitality Industry	3
HT-756	Quality Assurance and Customer Service	3
HT-758	Hospitality Operational Systems	3

For information: Robert Davies, daviesb@uwstout.edu, 715/232-1480

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TCS-141	Networking Fundamentals I	2
TCS-142	Networking Fundamentals II	2
TCS-143	Networking Fundamentals III	2
TCS-144	Networking Fundamentals IV	2
Exam: Cisco CCNA		
TCS-382/582	Network System Design	3
Exam: Cisco DCN		

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Cisco Certified Network Professional Exam Preparation Certificate

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Exam: Cisco Routing		
TCS-442/642	Remote Access Networks	3
Exam: Cisco Remote Access		
TCS-443/643	Multi-Layer Switched Networks	3
Exam: Cisco Switching		
TCS-444/644	Internetwork Troubleshooting	3
Exam: Cisco Support		

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Exam: Cisco Remote Access		
TCS-443/643	Multi-Layer Switched Networks	3
Exam: Cisco Switching		
TCS-445/645	Internetwork Design	3
Exam: Cisco Design		

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HT-700	Issues in Hospitality and Tourism	3
HT-701	Hospitality and Tourism Research Interpretations	3
HT-754	Managing Technology in Hospitality	3
HT-755	Leadership in Service Industries	3

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TRHRD-360/560	Training Systems in Business and Industry	3
ECON-421/621	Collective Bargaining and Labor Relations	2
RC-381/581	Occupational Safety/Loss Control	2-3

For more information: Mitchell Sherman, shermanm@uwstout.edu, 715/232-2658

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SRVM-610	Electronic Service Management	3
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HT-753	Managing Finance in the Hospitality Industry	3
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HT-758	Hospitality Operational Systems	3

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TCS-144	Networking Fundamentals IV	2
Exam: Cisco CCNA		

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TCS-141	Networking Fundamentals I	2
TCS-142	Networking Fundamentals II	2
TCS-143	Networking Fundamentals III	2
TCS-144	Networking Fundamentals IV	2
Exam: Cisco CCNA		
TCS-382/582	Network System Design	3
Exam: Cisco DCN		

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Exam: Cisco CCNA		

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Exam: Cisco CCNA		
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CAS College of Arts and Sciences

CAS-575 The Ascent of Man 2 cr.

Spring

Exploring the nature and intellectual, philosophical and technical growth of humankind using "The Ascent of Man" TV series as basis for thought and discussion.

Equivalent to 300-575.

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BIO Biology

BIO-560 Introduction to Neuroscience 3 cr.

Fall

Investigation of the human nervous system at the molecular, cellular and system level. Organization and function of neuronal cells, sensory receptors, sensory and motor pathways and integration centers.

Introduction to electro- physiology, biochemistry of neurotransmitters and receptors, neuropharmacology, development of the nervous system, and consequences of neuronal disease and trauma.

Equivalent to BIO-560, 308-650.

BIO-561 Psychobiology 2 cr.

Spring

Biological basis of human and animal behavior: evolution of physiological and behavioral adaptations of organisms to their environment.

Equivalent to 308-651.

BIO-606 Food Microbiology 3 cr.

Fall and Spring

Methods of food preservation, their effectiveness and related food spoilage by microorganisms. Quality control techniques used to determine presence of specific groups of economically important microorganisms.

Equivalent to 308-506.

BIO-720 Toxicology and Radiation Biology 3 cr.

Fall

Symptoms and physiological consequences of exposure to toxic chemicals and radiation.

Equivalent to 308-720.

CHEM Chemistry

CHEM-501 Physical Chemistry Lecture 3 cr.

Fall and Spring

Fundamental physical chemistry; behavior of gases, liquid state, properties of solutions, principles of thermodynamics, thermochemistry. Taken concurrently with CHEM-503. Recommended: CHEM-531.

Equivalent to 311-501.

CHEM-503 Physical Chemistry Laboratory 1 cr.

Lab course to be taken concurrently with CHEM-501. Experimental techniques and apparatus; treatment of experimental data. Recommended: CHEM-531.

Equivalent to 311-503.

CHEM-511 Biochemistry 4 cr.

Fall and Spring

Fundamental chemistry and metabolism of carbohydrates, lipids and proteins; second- and third-order structure of proteins; chemistry of nucleic acids; nature and dynamics of enzymes and enzyme action; biological oxidations; lab work in metabolism, chromatography, enzyme action, qualitative and quantitative analytical procedures.

Equivalent to 311-511.

CHEM-515 Food Chemistry 3 cr.

Spring

Organic biochemistry of foods: enzymatic and non-enzymatic changes associated with food preparation and storage (Maillard-Browning reaction), denaturation of protein, changes in color, odor, texture and nutritive value.

Techniques for isolation and identification of biochemical constituents of foods.

Equivalent to 311-515.

CHEM-531 Quantitative Analysis 3 cr.

Fall

Introduction to the principles of quantitative chemical analysis and training in precision laboratory techniques.

Equivalent to 311-531.

CHEM-535 Instrumental Methods of Analysis 3 cr.

Spring

Application of instrumental methods to chemical analysis: electrochemical,

spectrophotometric, chromatographic, and thermal analysis. Techniques for methods development, sample preparation, optimization of operating conditions, and data analysis needed to obtain accurate, reproducible results by means of instrumentation.
Equivalent to 311-535.

CHEM-541 Chemistry of Materials 4 cr.

Fall and Spring

Relationship of the chemistry and microstructure of structural materials (metals, polymers and ceramics) to their properties; degradation of those materials, corrosion of metals, polymers and ceramics.

Equivalent to 311-541.

CHEM-553 Environmental Chemistry 3 cr.

Fall and Spring

Principles and origins of chemical reactions that lead to ecological imbalance; systems that have contributed to large-scale environmental pollution or are of current importance; chemical technology needed to correct imbalance.

Equivalent to 311-553.

CHEM-612 Advanced Biochemistry 3 cr.

Fall and Spring

Molecular biology of humans and other organisms; biosynthesis and catabolism, emphasizing enzyme action; chemistry of specific tissues and fluids.

Equivalent to 311-612.

CHEM-652 Environmental Regulations Management 3 cr.

Fall, Spring and Summer

Laws governing environmental issues. Environmental regulations, applicability of the laws, and resources for interpreting the regulations. Evaluation of environmental research.

Equivalent to CHEM-752.

CHEM-710 Industrial Hygiene Instrumentation 2 cr.

Fall, Spring and Summer

Work place environment analysis by direct reading and integrated sampling techniques.

Equivalent to 311-710, 312-710. C: CHEM-742.

CHEM-742 Industrial Hygiene 3 cr.

Principles and techniques for recognizing, evaluating and controlling existing or potential occupational health hazards that affect employee safety and health.

Equivalent to 312-742. C: CHEM-710.

CHEM-762 Industrial Hygiene Ventilation and Noise Control 3 cr.

Spring

Evaluation and testing of contaminant control ventilation systems for removal of toxic gases, vapors, and particulates from work environments. Evaluation of noise exposures and application of noise control methods to reduce worker exposures.

Equivalent to 312-762. P: CHEM-742 AEC-652. \$

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ENGL English

ENGL-546 Research Reporting 3 cr.

Fall

Effective organization and presentation of individual research.

Equivalent to 326-546.

ENGL-601 Juvenile Fiction Seminar 1-3 cr.

Children's literature, emphasizing the picture book. Methods of selecting and reading picture books of all types with critical examination. Literary, historical and social implications of picture books.

Equivalent to 326-601.

ENGL-615 Technical Writing 3 cr.

Fall, Spring and Summer

On-the-job writing for business and industry; reports, letters and other documents.

Equivalent to 326-515.

ENGL-635 Writing Technical Manuals 3 cr.

Fall, Spring and Summer

Production of a technical manual: planning procedure, collecting information, analyzing audience, writing and field testing.

Equivalent to 326-535.

ENGL-637 Technical Writing Practicum 1-3 cr.

Fall, Spring and Summer

Plan, write and produce a technical document for a client. Principles of

document design, clear writing for a specific audience, methods of determining client needs, and methods of producing the final document.
Equivalent to 326-537. R

ENGL-638 Writing Practicum for Early Childhood Education 1 cr.

Creation of professional letters, newsletters, and other written documents for future early childhood educators.

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LIT Literature

LIT-502 Topics in Literature 1 cr.

Readings in Popular American Literature: A study of great books by respected American authors whose work is also popular. R

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MSCS Mathematics, Statistics and Computer Science

MSCS-590 Film-History and Appreciation 3 cr.

Topics of current importance in applications of mathematics to problems in business, industry, government or society. May be repeated for additional credit with consent of program director. R

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STAT Statistics

STAT-520 Statistical Methods 3 cr.

Fall, Spring and Summer

Histograms, mean and standard deviation, combinatorics, probability; binomial, hypergeometric, normal, Chi-square, T and F distributions and their uses; statistical inference; contingency tables, linear models, analysis of variance with appropriate applications. Three years of high school mathematics required. Equivalent to 354-530.

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ANTH Anthropology

ANTH-620 The Anthropological Study of Family Systems 3 cr.

Spring

Anthropological, cross-cultural view of family systems, with attention to their organization, functions, dynamics and articulation with other institutions.

Equivalent to 303-610.

ANTH-630 Ojibwe Lifeways 4 cr.

Summer

Indepth, interactive study of Ojibwe culture within a Wisconsin reservation community.

Equivalent to 303-630. \$

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ECON Economics

ECON-510 Women and Work 3 cr.

Issues pertaining to changes in women's roles in the paid labor force, including past and present participation, the female-male earnings gap, public policy, and employer response.

Equivalent to 320-510

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POLS Political Science

POLS-515 Public Policy Analysis 3 cr.

Fall and Spring

Analysis of origins of public policy and policy-making process. Specific case studies of public policy.

Equivalent to 375-510.

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SOC Sociology

SOC-515 Criminology 3 cr.

Fall and Spring

Sociological analysis of structure and function of criminal law, variables of criminal behavior and operation of criminal justice system.

Equivalent to 387-515.

SOC-525 Sociology of Leisure 3 cr.

Fall and Spring

Institutional approach to effects of leisure on social structure; values reflected in leisure; problems with increase in leisure resources.

Equivalent to 387-525.

SOC-540 Sociology of Work 3 cr.

Fall and Spring

Human behavior in various types of employment and occupations; trends in U.S. occupational structure.

Equivalent to 387-540.

SOC-550 Sociology of Hmong Culture 1 cr.

Sociological overview of Hmong cultural values, history, immigration and resettlement experiences, family and clan functions, and spiritual beliefs and practices.

Equivalent to 387-550. \$

SOC-560 Sociology of Juvenile Delinquency 3 cr.

Fall and Spring

Definitions of and trends in deviant behavior among youth; research findings; efforts in prevention, control and treatment.

Equivalent to 387-560.

SOC-616 People Process Organization Cultures 2 cr.

Fall and Spring

A study of high performing people process culture organizations integrating

sociology, applied psychology, and organization behavior subject matter areas.
P: INMGT-600 or PSYC-582.

SOC-710 Counseling and Symbolic Interactionism 3 cr.

Summer

A sociological perspective will be briefly introduced (or reintroduced), applied to an examination of certain problems of modern society relevant to the practice of the guidance counselor, and finally, directed to an analysis of the social role of the guidance counselor.

Equivalent to 387-710.

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SPCOM Speech Communication

SPCOM-508 Speech Skills for Business and Industry 2 cr.

Fall, Spring and Summer

Technical speaking; projects in application of speech skills and activities in business and industry.

Equivalent to 391-508.

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CHD College of Human Development

CHD-700 Trends in Home Economics 2 cr.

Spring and Summer

Study of societal trends that will influence the professional areas of home economics in the United States. Emphasis will be on improving the understanding of societal needs, the relationship among home economics areas and the future of home economics services. Instructor's consent required.

Equivalent to 200-700.

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EDUC Education

EDUC-507 Applied Human Relations 2 cr.

Fall, Spring and Summer

An experiential course focusing on major themes affecting human relations.

Equivalent to 421-507.

EDUC-536 Multiculturalism: Issues and Perspectives 2 cr.

Fall, Spring and Summer

Intensive study of diversity in U.S. schools. Examination of the educational needs of students from various ethnic, cultural, religious, language and social class groups. Discussion of issues related to racism, sexism and oppression.

Equivalent to 421-536, 421-536A.

EDUC-576 Field Experience: Cross-Cultural Experience 1 cr.

Fall, Spring and Summer

Supervised one-on-one or small group experience in a school or other setting in response to a special academic or social need with representatives of one or more of the following designated ethnic minority groups: African-Americans, Asian-Americans, Pacific Islander-Americans, American Indians and Hispanic-Americans; and various socioeconomic groups, specifically the low income.

Equivalent to 421-576.

EDUC-580 Reading and Language Arts in Elementary Education 3 cr.

Fall, Spring and Summer

Current philosophies in reading and language arts education, the centrality of language arts to the elementary curriculum and methodologies for the elementary classroom.

Equivalent to 421-580.

EDUC-581 Preclinical: Elementary Education Language Arts and Reading 1 cr.

Fall, Spring and Summer

Supervised teaching experience in developing the prospective teacher's ability in elementary education language arts and reading skills.

Equivalent to 421-581. P: EDUC-580.

EDUC-582 Secondary Reading and Language Development 2 cr.

Fall, Spring and Summer

Effective utilization of reading and language development methodologies in secondary content area classrooms.
Equivalent to 421-582.

EDUC-600 Workshop: Special Topics in Education 1-3 cr.

Current specialized topics studied through experimental activities.
Equivalent to 421-600. R

EDUC-630 Ojibwe Lifeways 4 cr.

Summer

Indepth, interactive study of Ojibwe culture within a Wisconsin reservation community.

Equivalent to 421-630. \$

EDUC-726 Administration 2-3 cr.

Philosophy and principles underlying organization and operation of public education on the local, state and national levels in the United States. Examinations of prevailing practices and current problems of school management.

Equivalent to 421-726.

EDUC-727 Supervision of Student Teachers 2 cr.

Fall, Spring and Summer

Purpose and philosophy of supervision, the role of the cadet center in preparing teachers, relationships and responsibilities of persons involved, orientation, guidance, and evaluation of student teachers.

Equivalent to EDUC-726, 421-726, 421-727.

EDUC-729 Introduction to Educational Research 1 cr.

Fall, Spring and Summer

Overview of educational research; identification of research topics and development of a research proposal.

Equivalent to EDUC-740, 421-729.

EDUC-735 Problems in Education 2 cr.

Fall, Spring and Summer

Identification, selection and completion of a research problem in education culminating in a Plan B research paper. Consent of program director.

Equivalent to 421-765. Prerequisites: take 421-740.

EDUC-740 Research Foundations 4 cr.

Fall, Spring and Summer

This course serves as an introduction to basic concepts and principles in educational research. The course utilizes mastery grading and elements of

individualized instruction. The course functions to help prepare the student for his own graduate research experiences and also to prepare him to be an articulate consumer of research upon completion of the course.
Equivalent to EDUC-729, 421-729, 421-740.

EDUC-742 Program Evaluation 3 cr.

Surveys theory and practice of evaluating the effectiveness of a variety of human-service delivering systems, including education. Develops applied competencies in analyzing values and needs of decision makers and articulation and assessment of program objectives (both process and product). Emphasis on building efficient, ongoing evaluation systems.
Equivalent to 421-742.

EDUC-750 Curriculum Theory and Practice 2-3 cr.

Fall, Spring and Summer

A study of curriculum theory and its application. An analysis and development of a rationale, writing educational objectives, identifying a body of knowledge, specifying methodology, and conducting curriculum evaluation.
Equivalent to 421-750.

EDUC-770 Thesis 2-6 cr.

Fall, Spring and Summer

Independent research under direction of investigation adviser. Selection of problem, review of literature, planning and conducting research, interpretation of findings and preparation of final paper according to thesis standards. Student may enroll for two, four or six semester hours of credit in various terms for a final total of six. Consent of program director.
Equivalent to 421-770. P: 421-740. R

EDUC-782 Instructional Analysis 4 cr.

Spring

Social/political forces utilized in planning and implementing instruction. Principles and strategies for a self-analysis of teaching behavior. Examination of the social aspects of teacher learning and knowledge production and the relationships between learning and instruction.
Equivalent to 421-782, 421-720.

EDUC-816 Instrumentation for Research 3 cr.

Basic concepts in the areas of validity and reliability will be studied and applied to the design of instruments. Emphasis will be placed on conceptualizing the constructs or characteristics to be measured. Techniques of item writing, item analysis, determining reliability, and scaling will be covered, including such ideas as acquiescent set, item difficulty and discrimination. The student will engage in the study of procedures and techniques for gathering, analyzing and reporting data and findings as applied to his proposed field study.
Equivalent to 421-816.

EDUC-895 Field Study in Professional Education 2-6 cr.

Fall, Spring and Summer

Supervised study which provides the graduate student with the opportunity to:
1) explore in-depth the body of knowledge associated with a selected problem in professional education, 2) provide an educational experience for implementing this knowledge into a selected institutional setting, and 3) devise methods to determine if the implementation is or will be successful. Consent of program director.

Equivalent to 421-890.

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SPED Special Education

SPED-500 Introduction to Individuals With Cognitive Disabilities 3 cr.

Fall

Introduction to etiology of mental retardation; psychological, educational, social and vocational aspects; adjustment techniques used in working with mentally retarded persons.

Equivalent to 431-585, 431-500.

SPED-501 Learning Disabilities 3 cr.

Spring

Identification, remediation and evaluation of learning disabled; intervention techniques used with adolescents and adults.

Equivalent to 431-501.

SPED-505 Introduction to Early Childhood Special Education 2 cr.

Summer

Introduction to the history and purpose of Early Childhood Special Education programming, legislation, population receiving services, family intervention, intervention models and issues.

P: SPED-430 or SPED-630.

SPED-510 Methods, Materials and Curriculum for the Exceptional Child 3 cr.

Fall

Curricular and methodological adaptation for young children with exceptional educational needs in the areas of social-emotional development, manipulative and motor skills, self-help skills, communication, cognitive development, and creative expression. Admission to Early Childhood-Special Education certification track.

P: SPED-505.

**SPED-515 Early Childhood Special Education Programming
3 cr.**

Spring

Organization and implementation of Early Childhood Special Education programs, including service delivery, program models, consultation and collaboration, and intervention agents.

P: SPED-505 SPED-510.

**SPED-518 Introduction to Teaching/Assessment in Special
Education 2 cr.**

Fall, Spring and Summer

Provides one-on-one, supervised experience in teaching youth with exceptional education need (EEN). Provides the initial opportunity for the student to teach a young person with EEN in a supervised setting for 50 hours.

Equivalent to 431-518, 431-562.

**SPED-520 Early Childhood Exceptional Educational Needs
Assessment 2 cr.**

Summer

Assessment and diagnosis of the young child with a suspected disability. Norm reference, criterion referenced, and play-based assessment in the following areas: cognitive, motor, speech/language social/emotional, and family.

Admission to Early Childhood-Special Education certification track.

P: SPED-515.

**SPED-522 Curriculum and Instruction: Functional Living
Skills 2 cr.**

Spring

Curriculum and instructional techniques for developing basic functional living skills for persons with cognitive disabilities, borderline and severe.

Equivalent to 431-522. P: SPED-500, SPED-630.

SPED-523 Curriculum and Instruction: Academic Skills 3 cr.

Fall and Spring

Curriculum and instructional techniques for developing academic skills for persons with cognitive disabilities (borderline and severe).

Equivalent to 431-523. P: SPED-500, SPED-630.

SPED-524 Curriculum and Instruction: Career and Transition Education 3 cr.

Fall

Curriculum and instruction for persons with cognitive disabilities, borderline and severe, in prevocational career, vocational education, and transition stressing interdisciplinary cooperation.

Equivalent to 431-524. P: SPED-500, SPED-630.

SPED-526 Practicum in Special Education 2 cr.

Fall

Off-campus work and study in educational settings with youth with cognitive disabilities borderline (CDB) and/or cognitive disabilities severe (CDS) for a minimum of 50 hours in a supervised setting, utilizing the teaching techniques and methods previously learned.

Equivalent to 431-526. P: SPED-518.

SPED-528 Assessment for Individual Education/Transition Plans 3 cr.

Fall, Spring and Summer

Diagnosing behavior and learning problems of students with exceptional education needs. Preparing individual educational and transitional plans based on comprehensive assessments.

Equivalent to 431-528. P: REHAB-620.

SPED-600 Workshop: Topics in Special Education 1-3 cr.

Summer

Current specialized topics studied through experiential activities.

Equivalent to 431-600.

SPED-630 Inclusion of Students With Exceptional Needs 3 cr.

Fall, Spring and Summer

Inclusion of students with exceptional educational needs in the regular classroom setting. Laws, definition, characteristics, adaptations, strategies and transitional services that pertain to persons identified with: cognitive disability, learning disability, attention deficit hyperactivity disorder, emotional disability, autism, traumatic brain injury, speech and language disorders, visual and hearing loss, physical and other health impairments, and gifted and talented.

Equivalent to 431-630.

SPED-662 Classroom Management Techniques 3 cr.

Spring

Techniques for motivating handicapped youth, individual and group discipline, behavior modification, educational organization, evaluation, and communication to enhance learning.

Equivalent to 431-662.

SPED-682 Student Teaching Early Childhood Special Education 6 cr.

Directed teaching and community experiences in selected infant-toddler, preschool, or school based programs for children with disabilities. Admission to Early Childhood-Special Education certification track.

P: SPED-520, SPED-630.

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SPSY School Psychology

SPSY-701 Seminar: School Psychological Services 2 cr.

Summer

Introduction to the field of school psychology. Roles and functions of the school psychologist are explored as they relate to Wisconsin and the nation; political and legal implication of these roles are identified.

Equivalent to 489-701.

SPSY-710 Psychoeducational Assessment of Young Children 2 cr.

Fall

Assessment of the young child with a suspected disability and his/her family, training in the norm referenced, criterion referenced, and play-based assessment of young children.

Equivalent to 489-710. P: SPSY-753.

SPSY-735 Problems in School Psychology 2 cr.

Fall, Spring and Summer

Independent investigation into a carefully delineated area of school psychological services in an attempt to bring evidence to bear on a problem. The use of research techniques is required. Reporting of the study is expected to meet the standards appropriate to scholarly writing by professionals in the field.

Equivalent to 489-731. P: EDUC-740.

SPSY-743 Advanced Individual Mental Testing 3 cr.

Spring

An experience of supervised practice in the administration, scoring, and

interpretation of individual tests of mental ability. Emphasis is directed toward the use of such evaluation of intelligence to case history material, the integration of related psychological findings, the determination of prognosis, and planning for the individual client.
Equivalent to 489-743. P: SPSY-753, SPSY-753B.

SPSY-745 Assessment of Personality (Projective Techniques) 2 cr.

Summer

History, theory and methodological consideration and studies of projective instruments. Instruction in administration, scoring, and interpretation of some currently used devices leading to a knowledgeable understanding of the instruments.

Equivalent to 489-745. P: SPSY-743.

SPSY-753 Psychometric Theory and Application 2 cr.

Fall and Summer

Introduction to psychoeducational theory and concepts in relation to inter- and intra-individual assessment. Covers basic statistics, in regard to test construction, test uses and misuses, test selection, purposes of testing, ethics, basic test interpretation processes and types of tests and testing programs frequently employed by psychoeducational specialists.

Equivalent to 489-753.

SPSY-753A Laboratory , Guidance and Counseling Services 1 cr.

Fall and Summer

Introduction to basic psychometric materials and techniques employed by counselors. Included are individual inventories, aptitude and achievement tests, problem surveys and other screening devices. Prerequisite or corequisite: SPSY-753.

Equivalent to 489-753A.

SPSY-753B Laboratory , School Psychology 1 cr.

Fall

Introduction to basic psychometric materials and techniques employed by school psychologists. Emphasis is placed upon individual mental tests and procedures. Prerequisite or corequisite: SPSY-753.

Equivalent to 489-753B.

SPSY-766 Educational Applications of Neuropsychology 2 cr.

Summer

The application of neuropsychological theory and assessment techniques to the education of children who possess cortical damage or dysfunction.

Equivalent to 489-766. P: SPSY-753, SPSY-753B.

SPSY-768 Diagnosis and Remediation of Learning Disabilities 2 cr.

Spring

Develops expertise in understanding human information processing, the administration and interpretation of sophisticated psychological diagnostic instruments, and the prescription of appropriate and precise remediation. Current research in learning disabilities is examined and evaluated. Equivalent to SPSY-766, 489-766, 489-768. P: SPSY-753, SPSY-768A.

SPSY-768A Learning Disabilities , Diagnosis and Remediation Laboratory 1 cr.

Spring

Laboratory experience where administrative and scoring skills are developed in reference to instruments and techniques introduced in 489-768. Equivalent to 489-768A. P: SPSY-743, SPSY-768.

SPSY-770 Thesis 2-6 cr.

Fall, Spring and Summer

Independent research under direction of investigation advisor. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four or six semester hours of credit in various terms with a final total of six. Consent of program director. Equivalent to 489-770. P: EDUC-740. R

SPSY-775 School Consultation 2 cr.

Spring

Theory and processes of psychological/educational consultation. Develop specific consultative skills through the use of role play, feedback, and homework assignments to record a trial consultation session. Equivalent to 489-775.

SPSY-777 Legal/Ethical Issues for School Counselors and Psychologists 2 cr.

Fall

An investigation of laws, legal systems, professional ethics, statutory law, administrative codes case law, and other legal issues as applied to the professional practice of school counselors, school psychologists, and other educators. Equivalent to 489-777.

SPSY-778 Psychoeducational Disability 3 cr.

Fall

Etiology, characteristics, and Individual Educational Program (IEP)

development for children with Exceptional Educational Needs (EEN) such as mental retardation, emotional disturbances, behavioral disorders, social/cultural deviation and multi-handicapping conditions.
Equivalent to 489-778.

SPSY-781 Field Practicum in Psychoeducational Services I 3 cr.

Fall and Spring

Provides the prospective school psychologist with the initial "on site" experience of functioning as a school psychologist. Special educational evaluations, programming and introduction to complex cases and staffings. Equivalent to SPSY-777, 489-777, 489-781. P: SPSY-743, SPSY-768, SPSY-768A.

SPSY-782 Field Practicum in Psychoeducational Services II 3 cr.

Fall and Spring

Provides continuing "on site" experience of functioning as a school psychologist. Increased applications of expanded assessment skills, more complex diagnostic problems, intervention techniques and leadership roles within the placement setting.
Equivalent to 489-782. P: SPSY-781.

SPSY-784 Clinical Practicum in Psychoeducational Services I 2 cr.

Fall, Spring and Summer

This practicum course is designed to provide more intensive and extensive clinical experiences. Work with pre-school children, post-school young adults, school age children and their parents. Special assessment and intervention techniques are emphasized.
Equivalent to 489-784. P: SPSY-743, SPSY-768, SPSY-768A.

SPSY-785 Clinical Practicum in Psychoeducational Services II 2 cr.

Fall, Spring and Summer

Provides integrative learning experiences into the role and style of function appropriate to the individual and the profession. Long term therapeutic contacts are required. Experience in one or more areas of specialization is available.
Equivalent to 489-785. P: SPSY-784.

SPSY-792 Internship in School Psychology 6 cr.

The student will devote a minimum of 360 clock hours, full-time (one quarter) in supervised internship experiences. The student will be working with a certified school psychologist in local area schools and/or other approved personnel in other approved situations; e.g., a counseling psychologist in the APA approved University Counseling Center.

Equivalent to 489-792. R

SPSY-870 Specialist Thesis in School Psychology 3-6 cr.

Independent research project. Selection of a research problem, review and critical analysis of literature and research, development of research plan and methodology, data collection, interpretation of findings and preparation of paper. Thesis orally presented and defended to thesis advisor and committee. Consent of program director. Admission to Ed.S. program required.
P: EDUC-740. R

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FN Food and Nutrition

FN-510 Lifespan Nutrition 3 cr.

Nutrition concepts and concerns associated with each lifespan stage; integration of social, psychological, cultural, economic, and legislative factors to develop issue-centered approaches to meet nutrition needs.
Equivalent to 229-530.

FN-512 Nutritional Assessment 2 cr.

Fall, Spring and Summer
Introduction to basic components of nutritional assessment as applied to individuals.

FN-520 Advanced Nutrition 3 cr.

Principles of human nutrition applied to individual, family, community and world problems.
Equivalent to 229-520.

FN-525 Special Topics in Food and Nutrition 1-3 cr.

Fall
Study of special topics in food and nutrition.
Equivalent to 229-525. R

FN-542 Advanced Foods 3 cr.

Fall
Comparative studies of food selection and preparation; appraisal of foods.

Equivalent to 229-542, 229-642.

FN-550 Food Processing 3 cr.

Spring

Industrial methods used to prepare and preserve food.

Equivalent to 229-650.

FN-555 Sports Nutrition 3 cr.

Nutritional and metabolic requirements of physical activity. Metabolic fuel utilization during exercise and physiological adaptations to exercise training will be discussed. The health and well-being benefits of an optimal diet-exercise regime will be emphasized.

Equivalent to 229-555.

FN-560 Nutrition Counseling: A Team Approach 3 cr.

Inter-disciplinary team approach to individual and group client-centered nutrition counseling which includes assisting and advising clients on dietary information. Skills and techniques based on nutrition counseling theories that are most useful to registered dietitians in enhancing quality of life and planned nutrition intervention.

Equivalent to 229-560.

FN-606 Nutrition Education 3 cr.

Fall and Spring

Nutrition education as planned behavioral change: problems and solutions in instructing various populations; identification, development and evaluation of nutrition resources.

Equivalent to 229-606.

FN-610 Food and Nutrition Policy Regulation and Law 3 cr.

Food and nutrition policy development and evolution. Key acts and agencies governing food regulation and law. Process of creating or changing law. Compliance and enforcement rules in inspection, labeling, export and import. Administrative practice in food law including proceedings and judicial review.

Equivalent to 229-610.

FN-613 Maternal and Child Nutrition 3 cr.

Fall

Application of principles to maternal, infant, child and adolescent nutrition.

Equivalent to 229-633.

FN-614 Catering 3 cr.

Fall

Theory and application of operational and managerial principles for on/off-

premise catering for special events. (Cannot be taken for credit by students who have previously taken HT-624.)
Equivalent to HT-624, 245-614, 229-614.

FN-615 Nutritional Issues in Gerontology 3 cr.

Theory and relationships of nutrition, longevity and aging. Food and nutrition legislation for the elderly<theory and implementation. Nutritional implications of acute and chronic disease states common among the elderly.
Equivalent to FN-705, 229-705. P: FN-520, CHEM-511.

FN-618 Diet Therapy 4 cr.

Fall and Spring
Principles and methods for use of diet as therapy in certain pathological conditions.
Equivalent to 229-618.

FN-620 Food Styling 1-3 cr.

Fall and Summer
Food as media for artistic expression; effective use of color, form and texture.
Equivalent to 229-620. R

FN-631 Readings in Food Science and Nutrition 1-2 cr.

Critical reading, evaluating, and reporting from pertinent current journals and other publications.
Equivalent to 229-631. R

FN-638 Experimental Foods 3 cr.

Fall and Spring
Experimentation with selected food materials, techniques and equipment; directed study in individually chosen area.
Equivalent to 229-638.

FN-650 Food Engineering 3 cr.

Fall
Application of pertinent chemistry, physics and mathematics principles to food processing.
Equivalent to 229-651.

FN-661 Multicultural Aspects of Food and Nutrition Patterns 3 cr.

Food and nutrition patterns as influenced by social, religious, geographical, economic and political factors. Cultures emphasized include Native American, African American, Hispanic and Asian American. Food as a means of cross-cultural communication.

Equivalent to 229-661.

FN-670 Food Distribution Operations and Control 3 cr.

Current trends and management strategies in the distribution of food and beverages, from manufacturer to consumer.

Equivalent to 229-570.

FN-701 Trends in Nutrition 1-2 cr.

Practical application of recent developments in the field of nutrition.

Equivalent to 229-701. P: FN-212. R

FN-701 Trends in Nutrition 2 cr.

Students gain baseline knowledge on grant-writing skills for health care professions and develop expertise in selection of appropriate funding sources.

Equivalent to FN-525. R

FN-710 Clinical Nutrition 3 cr.

Innovative approaches in nutrition therapy. Clinical experience offered in area health care facilities.

Equivalent to 229-710. P: FN-618.

FN-712 Practicum in Community Nutrition Programs 1-2 cr.

Advanced experience in community nutrition programs. Individual project in nutrition counseling, identification, delivery and evaluation of nutrition and appropriate food services.

Equivalent to 229-712. P: FN-606, FN-618. R

FN-715 Menu Analysis and Planning 3 cr.

Principles of planning and designing menus for production and sales in commercial and institutional food services. Special emphasis is given to computerization of the menu planning process.

Equivalent to 229-715.

FN-720 Workshop in Foods 1 cr.

Discussion of current issues in food science and technology, food marketing and management, and for developing strategies for conducting and disseminating food related research. Includes critical analyses of variety of food oriented research projects.

FN-721 Workshop in Nutrition 1 cr.

Individual and group investigations and solutions of problems in nutrition science and nutrition education.

Equivalent to 229-721. R

FN-732 Advanced Nutritional Assessment 2 cr.

Fall, Spring and Summer

Study of advanced components of nutritional assessment and application to individual and group research.

P: FN-512, FN-520.

FN-735 Problems in Food Science and Nutrition 2 cr.

Fall, Spring and Summer

Identification, selection and completion of a problem in food science and nutrition, culminating in a Plan B paper and oral presentation of the paper.

Equivalent to 229-747. P: EDUC-740.

FN-736 Micronutrients 3 cr.

Absorption and intermediary metabolism of minerals, vitamins and other organic compounds with nutritional relevance. Analysis and application of current research as it relates to these micronutrients are emphasized.

Equivalent to 229-735. P: FN-520.

FN-737 Macronutrients 3 cr.

Digestion, absorption, transport, metabolism, health concerns, functions and micronutrient interrelationships to water, carbohydrate, lipid and protein are the focus of this course. Analysis and application of current research related to these macronutrients are emphasized.

Equivalent to 229-736. P: FN-520.

FN-740 Food Preservation Technology 3 cr.

Application and evaluation of the technology of food preservation to selected areas in food science.

Equivalent to 229-740. P: CHEM-511.

FN-742 Sensory Evaluation of Food 3 cr.

Selection, identification and measurement of food evaluation tools using consumer and laboratory sensory panels.

Equivalent to 229-742.

FN-746 Food Innovations 2-3 cr.

Effects of food industry innovations on preparation and service of foods.

Equivalent to 229-746.

FN-750 Food Packaging 3 cr.

Fall

Interrelationship of food and packaging. Technical content appropriate to solve

complex and interrelated problems in food packaging research and development. Instructor's consent required.

FN-756 Advanced Experimental Food 3-4 cr.

Fall and Spring

Principles of research methods applied to directed investigations in food preparation.

Equivalent to 229-756. P: FN-638.

FN-770 Thesis Food Science and Nutrition 1-6 cr.

Fall, Spring and Summer

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, preparation of the final paper according to thesis standards and oral presentation of the research. Student may enroll for variable semester hours of credit in various terms with a final total of six. Consent of program director.

Equivalent to 229-770. P: EDUC-740. R

FN-797 Field Experience 2 cr.

Equivalent to 229-797.

FN-865 Supervised Practice in Medical Nutrition Management 3-14 cr.

Fall, Spring and Summer

Supervised practice experience in clinical, community nutrition and foodservice management. Structured experiences are provided at hospital, clinic, community and public school sites. Successful completion of more than 900 hours for 18 credits meets the American Dietetic Association requirement for a supervised practice program.

Equivalent to 229-765. P: FN-710 with minimum grade B; FN-606 with a minimum grade B; FN-712 with a minimum grade of B. R

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HT Hospitality and Tourism

HT-523 Food Service Equipment 2 cr.

Fall, Spring and Summer

Factors affecting design, selection, physical facilities and utilities involved in foodservice equipment.

Equivalent to 245-521.

HT-524 Quantity Food Production 4 cr.

Fall, Spring and Summer

Quantity food production management concepts; menu planning, work production schedules, production analysis, food and labor cost controls, and sales projections, crisis and service management techniques; lab work in quantity food production and service; recipe development and introduction to productivity and work simplification concepts.

Equivalent to 245-513, 245-711.

HT-526 Introduction to Wines and Spirits 3 cr.

Fall, Spring and Summer

Applied and historical knowledge of wines and spirits from different regions of the world; emphasis on preparation, selection, accompaniment with food, basic cost control analysis and service. Must be 21 years or older. \$

HT-530 Resort Planning and Operation 3 cr.

Spring

Planning and operation of individual destination resorts. Analysis of resort concept, history, master planning, environmental impact, facility design, maintenance and operational management.

Equivalent to 245-644. P: HT-630.

HT-560 Hospitality and the Handicapped Traveler 1 cr.

Fall and Spring

Provide increased sensitivity to needs of handicapped traveler; problems and possible solutions for hospitality organizations.

Equivalent to 245-682.

HT-583 Yield Management 3 cr.

Fall and Spring

Investigation of the use of computer technology in the lodging industry for revenue planning, scheduling and performance evaluation. Specialized software will be used to analyze and evaluate hotel performance.

P: STAT-130.

HT-623 Wine and Food Pairing 3 cr.

Matching wine and food from different parts of the world using flavors, textures, and components present in food and wine as complementing strategies. Emphasis on menu planning, food preparation, cooking methods and wine tasting with foods.

Equivalent to 245-623. \$

HT-624 Catering 3 cr.

Fall and Spring

Theory and application of operational and managerial principles for on- or off-premise catering for special events.

Equivalent to FN-614, 245-614, 229-614.

HT-627 Professionalism: Social and Work Environment 1 cr.

The application of necessary skills to be professional in social and work environments with emphasis on professional dress, proper dining etiquette, business conversation and job search techniques.

Equivalent to 245-681. \$

HT-630 Lodging Administration 3 cr.

Fall and Spring

Analysis of theories, principles and techniques of lodging management; problems and issues encountered by management in providing quality service within cost-efficient organization.

Equivalent to 245-515.

HT-640 Sociocultural Systems of Tourism 3 cr.

Spring

Various psychosocial dimensions of tourism: motivation, development, community and conflict as related to consumer-tourists, tourists and residents.

Equivalent to 245-640.

HT-650 Food Service Administration 3 cr.

Fall and Spring

Organization and administration of institutional foodservice systems, personnel selection and training, cost control and problems of supervision.

Equivalent to 245-501.

HT-660 Hospitality Industry Law and Liability 3 cr.

Fall and Spring

Organization and administration of institutional foodservice systems, personnel selection and training, cost control and problems of supervision.

Equivalent to HT-623, 245-623, 245-625.

HT-661 Hospitality Industry Employee and Labor Relations 2 cr.

Fall and Spring

Investigation of employee and labor relations in the hospitality industry; history, legality and techniques of dealing with unionization.

Equivalent to HT-623, 245-623, 245-625.

HT-662 Hospitality Financial Analysis/Budget/Forecasting 3 cr.

Fall, Spring and Summer

Application of accounting and financial analysis techniques to managerial decision-making in hospitality industry.

Equivalent to 245-670.

HT-670 Hospitality Financial Analysis/Budget/Forecasting 3 cr.

Spring

Culminating professional course for the property management minor program.

Preparation of a management plan for a specific property. Discussion of current trends and industry problems.

Equivalent to 245-684.

HT-681 Special Problems in Hospitality and Tourism 1-3 cr.

Fall, Spring and Summer

Equivalent to 245-681 R

HT-700 Issues in Hospitality and Tourism 3 cr.

Fall

Significant topics, trends and issues in hospitality and tourism are investigated, developed and presented. Admission to the M.S. in Hospitality and Tourism program.

Equivalent to 245-710.

HT-701 Hospitality and Tourism Research Interpretation 3 cr.

Spring

Interpretation of advanced qualitative and quantitative research findings in the hospitality and tourism industries. Includes examination of data collection techniques and current research trends, including segmentation, group differentiation, product positioning and image formation.

Equivalent to HT-735, 245-747. P: EDUC-740, STAT-520.

HT-702 Seminar in Hospitality and Tourism 1 cr.

Fall and Spring

Discussion and interpretation of recent research in hospitality and tourism.

Choice of problems based upon the needs and interests of the students.

Equivalent to 245-780.

HT-717 Hospitality and Tourism Colloquium I 1 cr.

Hospitality and Tourism graduate faculty and guest lecturers will present research concepts, issues and studies related to hospitality, tourism and travel related industries. The focus is on issues relevant to the students and their

hospitality and tourism research project.

HT-718 Hospitality and Tourism Colloquium II 1 cr.

Hospitality and tourism graduate faculty and guest lecturers will present research concepts, issues and studies related to hospitality, tourism and travel related industries. The focus is on issues relevant to the students and their hospitality and tourism research project.

HT-720 Management Concepts in Food Administration 1 cr.

Spring and Summer

Management concepts as they apply to institutional food service operations. Equivalent to 245-700.

HT-721 Operational Controls in Food Service Management 1 cr.

Summer

A management plan designed to incorporate all necessary controls the institution needs to minimize incurred expenses and maximize work performance associated with production. Equivalent to 245-702.

HT-735 Problems in Hospitality and Tourism 3 cr.

Independent research under direction of research adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, research methodology, conducting research in the hospitality of tourism field. Interpretation of results and a formal presentation is required. Consent of program director.

Equivalent to HT-701, 245-747, 245-770. P: EDUC-740.

HT-747 Seminar in Hospitality Management 3 cr.

Summer

Contemporary management theories and techniques to effectively manage a dynamic and diverse hospitality and tourism industry. Topics will address issues that relate to current and future needs. R

HT-751 Strategic Management in Hospitality 3 cr.

Fall and Spring

Strategies used by hospitality managers and owners to achieve organizational objectives.

Equivalent to BUMGT-751.

HT-753 Managing Finance in the Hospitality Industry 3 cr.

Fall and Spring

Analytical skills needed to interpret and act upon financial data and information

that lead to sound financial decisions for hospitality organizations. Capital budgeting methods, financial statement analysis, break even analysis, short and long-term financing methods, and cost controls.
Equivalent to BUACT-753.

HT-754 Managing Technology in Hospitality and Service Industries 3 cr.

Fall and Spring

Understanding information technology, systems development methodologies, and strategic information systems planning from a service industry perspective. Thinking tactically, strategically, and creatively in applying information technology solutions to meet the global business environment and drive new hospitality business opportunities.

HT-755 Leadership and Management in the Hospitality Industry 3 cr.

Fall and Spring

Leadership principles, values, and strategies in the hospitality industry. Leadership as a process and a function which can be exercised from anywhere in the organization. Initiating and accommodating individual and organizational change; motivation and conflict management strategies for diverse hospitality/tourism environments.

HT-756 Hospitality and Tourism Quality Assurance and Customer Service 3 cr.

Fall, Spring and Summer

Evolution of the service quality movement, assessment, and analysis and synthesis of profitable service business models.

HT-758 Hospitality Operational Systems 3 cr.

Fall and Spring

Capstone opportunity to explore, compare and synthesize the practices, concepts and theories in global hospitality management systems. Evaluating and solving operational problems.

HT-770 Thesis in Hospitality and Tourism 1-6 cr.

Fall, Spring and Summer

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, research methodology, conducting of research, interpretation of findings, and preparation of the final draft according to thesis standards. Student may enroll for variable credits in various semesters with a final total of six.

Equivalent to 245-789. P: EDUC-740.

FCSE Family and Consumer Sciences Education

FCSE-500 Externship: Family and Consumer Sciences Community Education 4-8 cr.

Fall and Spring

Practicum in one or more of the following family and consumer sciences education programs: extension services, elementary education, post-secondary education, occupational teaching experience and community educational services. Approval of graduate program director required if taken for graduate credit. Consent of program director.

Equivalent to 242-500.

FCSE-503 Family and Consumer Sciences Education in the Middle and Elementary Schools 3 cr.

Spring

Develop techniques, materials and curriculum concepts in family and consumer sciences education with application of human growth and development principles for teaching in middle and elementary school.

Equivalent to 242-503.

FCSE-520 Vocational Programs in Family and Consumer Sciences Education 2 cr.

Fall and Spring

Techniques, materials and curriculum for home economics wage-earning programs in secondary and post-secondary schools; preliminary procedures for program development.

Equivalent to 242-620.

FCSE-544 Future Homemakers of America Workshop 1-2 cr.

Summer

Integration of Future Homemakers of America and the Home Economics Related Occupations student organizations into the family and consumer science education classroom.

Equivalent to 242-544.

FCSE-651 Family Life Education Programs 2 cr.

Fall

Development of family life education programs including methods, materials and techniques for teaching family relationships and child development at the secondary level. Instructor's consent required.
Equivalent to 242-651.

FCSE-708 Curriculum Studies in Home Economics 2 cr.

Principles of curriculum construction. Review of recent literature on curriculum development. Evaluation of curriculum practice and techniques.
Equivalent to 242-708.

FCSE-710 Applied Evaluation in Home Economics 2 cr.

Theory and application of principles in planning evaluation techniques in home economics to assess behavioral changes in the cognitive, affective and psychomotor domains.
Equivalent to 242-710.

FCSE-720 Special Topics in Home Economics Education 1-2 cr.

Consideration of problems in contemporary living that are affecting home economics education and their influence on the teaching of homemaking.

FCSE-725 Graduate Internship in Home Economics 8 cr.

Fall and Spring

A clinical assignment in a school for one semester during which time the student integrates in-depth academic knowledge and pedagogical skill. Home Economics majors only. Consent of program director.
Equivalent to 242-725.

FCSE-735 Problems in Home Economics 2 cr.

Identification, selection and completion of a problem in home economics education, culminating in a Plan B paper.
Equivalent to 242-775. P: EDUC-740.

FCSE-744 Seminar in Home Economics Education 1-2 cr.

Issues in home economics education.
Equivalent to 242-744.

FCSE-770 Thesis Home Economics 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four or six semester hours of credit in various terms with a final total of six. Consent of program director.

Equivalent to 242-770. P: EDUC-740. R

FCSE-797 Field Experience in Family and Consumer Sciences Education 2 cr.

Field experience related to family and consumer sciences education skills and knowledge used in teaching wage-earning courses at secondary level.

Equivalent to FCSE-597, 242-597.

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HDFL Human Development and Family Living

HDFL-510 Family Stress, Coping and Adaptation 1 cr.

Summer

Impact of family development and stress on individual and family well-being.

Equivalent to 212-510, 212-615.

HDFL-520 Family Stress, Coping and Adaptation 1 cr.

Fall, Spring and Summer

Trends and issues in divorce, single parenting and remarriage related to effects on adults, children and society.

Equivalent to 212-520A, 212-525.

HDFL-530 Adulthood and the Family 3 cr.

Spring

Study of adults in the family context during the early and middle years.

Equivalent to 212-530A, 212-530.

HDFL-531 Hospice Clinical Experience 1-2 cr.

Fall, Spring and Summer

Work with an area hospice organization under the supervision of the hospice consultant or patient care coordinator.

Equivalent to 212-531. P: 212-351.

HDFL-532 Death and Bereavement 3 cr.

Spring and Summer

Significance of death and bereavement for the American culture, individual and family.

Special consideration given to major tasks of grieving for children and adults.

HDFL-535 Seminar: The Culturally Distinct Child and Family 2 cr.

Fall and Spring

Study of cultural, ethnic, racial and economic influences on the child and family in the United States. Emphasis on knowledge and skills to improve human relations in settings serving young children and families.

Equivalent to 212-535, 212-685.

HDFL-536 Experience: The Culturally Distinct Child and Family 1 cr.

Fall and Spring

Intensive experience working directly with racial, cultural or economic groups whose background the student does not share.

Equivalent to 212-686, 212-536.

HDFL-540 Human Development: Aging Person 3 cr.

Fall and Spring

Survey of the field of gerontology focusing on what it means to grow old in the United States from a systemic perspective. Multicultural attitudes toward aging; the psychological, physical, social and economic needs and problems of the older population are addressed. Consideration will be given to the personal, familial, environmental and social resources of the older population.

Equivalent to 212-540A, 212-680.

HDFL-541 Family Caregiving to Dependent Elders 1 cr.

Fall, Spring and Summer

Unique challenges confronting adult children who provide care to aging parents. Government, agency, workplace and family policies and practices promoting and/or undermining family strengths and well-being.

Equivalent to 212-540.

HDFL-544 Primary Curriculum: Science, Math, Social Studies 4 cr.

Fall, Spring and Summer

Curriculum planning for the primary levels of instruction, with particular emphasis on patterns of instructional organization and the planning, implementing and evaluating of sound science, mathematics and social science curricula.

Equivalent to 212-544.

HDFL-545 Health Care Dilemmas and Decisions for Families 2 cr.

Spring

Multidisciplinary study of bioethical issues facing U.S. families, including end-of-life decision making, reproductive technologies, and distributive justice

Equivalent to 212-545A, 212-605.

HDFL-560 The Workplace and the Family 2 cr.

Spring

Linkages between families and workplace; corresponding consequences for individual family well-being and the workplace.

Equivalent to 212-560, 212-654.

HDFL-565 Family Resource Management 2 cr.

Fall, Spring and Summer

Examination of individual and family resource management behaviors including: valuing, goal setting, decision making, implementation, resource use, resource exchange and resource creation, and cultural differences in resource management. Instructor's consent required.

Equivalent to 212-565.

HDFL-585 Family-Based Employee Assistance Programs 3 cr.

Fall, Spring and Summer

Structures and functions of employee assistance programs with employees and their families being the primary unit of analysis and service. Instructor's consent required.

Equivalent to 212-585.

HDFL-595 Special Topics in Human Development 1-2 cr.

Fall

Special topics in human development; repeatable for different topics.

Equivalent to 212-595. R

HDFL-607 Parent Counseling 2 cr.

Approaches and techniques for working with parents; observation and experience in

childrearing problems parents face.
Equivalent to 212-607.

HDFL-624 Advanced Child Study 3 cr.

A study of principles and review of literature pertaining to children.
Equivalent to 212-624.

HDFL-625 Death Education and Counseling in Families 2 cr.

Spring

Death and dying theory; research, practice and application in education and individual and family counseling.

Equivalent to 212-690.

HDFL-626 Special Topics in the Study of Family Life 1-3 cr.

Family life programs and literature; individual study of problems of personal or professional interest.

Equivalent to 212-626.

HDFL-637 Seminar in Child Development 2 cr.

Fall and Spring

Special problems and aspects in child development; preference given to students' interests.

Equivalent to 212-637.

HDFL-640 Child and Family Law 3 cr.

Fall and Spring

Legal issues affecting children and families.

Equivalent to 212-601.

HDFL-650 Family Impact Seminar 3 cr.

Fall and Spring

Content, methods and process of assessing impact of public policy on children and families.

Equivalent to 212-610.

HDFL-654 Suicide and the Family: Family and Community Intervention 1 cr.

Analysis of attempted and completed suicides from an interdisciplinary perspective. Forms of intervention, with emphasis upon family therapy, are compared, contrasted, and evaluated for suitability.

Equivalent to 212-626.

HDFL-656 Abuse and the Family 3 cr.

Fall, Spring and Summer

Definition and analysis of types of abuse in family context. Interrelationship of victims, perpetrators, other family members, helping professionals, social context. Risk factors, effects, reporting and recovery.

HDFL-662 Early Childhood Education Program Models 1 cr.

Fall, Spring and Summer

Exploration and analysis of contemporary early childhood education program models and practices in various settings.

Equivalent to 212-662.

HDFL-664 Special Topics in Early Childhood Curriculum 1-3 cr.

Philosophy and methodology of early childhood education: problems confronting teachers.

Equivalent to 212-664, 212-664, HDFL-664. R

HDFL-703 Seminar in Child Development 3 cr.

Advanced seminar in study of all aspects of child development.

Equivalent to 212-703.

HDFL-704 Child/Family Services 2 cr.

Fall, Spring and Summer

Social change, government initiatives, and recent research related to quality programs for early care and education of young children.

Equivalent to 212-704.

HDFL-707 Issues and Problems in Parent Education 2 cr.

A study of the issues and problems of parent groups and the training of parent-group leaders. Instructor's consent required.

Equivalent to 212-707.

HDFL-715 Theories of Family Processes 2 cr.

Fall, Spring and Summer

Advanced analysis of family interaction theory. Emphasis is on normal family processes as they apply to the practice of marital and family intervention.

Equivalent to 212-715.

HDFL-728 Family Life Issues 2 cr.

A study of current issues and problems in marriage and the family. An investigation of research, literature and consideration of theoretical interpretations in today's world. An exploration of how familial experiences affect behavioral patterns and attitudes of children, adults and self.

Equivalent to 212-728.

HDFL-740 Special Problems in Family Life Education 2 cr.

Planning and implementation of community programs in family life education.

Equivalent to 212-740.

HDFL-742 Lifespan Family and Human Development Seminar 2-3 cr.

Human development theory; research, changing trends and issues are explored with focus upon family life cycle variations. Emphasis is given to the application of scientific knowledge to select issues and thematic narratives of lifespan development as well as to information regarding child development in families and their sociocultural contexts.

Equivalent to HDFL-742, 212-742.

HDFL-750 Systems of Marital and Family Therapy 3 cr.

Fall

Survey of conceptual frameworks and approaches to marital and family therapy from a systems point of view.

Equivalent to 212-750.

HDFL-751 Seminar in Marriage and Family Therapy 3 cr.

Spring

Advanced and in-depth study of the issues, skills and methods in premarital intervention and marriage and family therapy.

Equivalent to 212-751. P: HDFL-750.

HDFL-755 Professional Issues in Marriage and Family Therapy 3 cr.

Exploration of the issues in the development of professional skills, attitudes and identity in the area of marriage and family therapy.

Equivalent to 212-755. P: HDFL-750.

HDFL-760 Sex Therapy Seminar 2 cr.

Spring

This course is offered to graduate students, who have already taken a basic course in human sexuality and who plan to work in the helping professions. Its main goal is to provide participants with the basic skills, knowledge and attitudes that will enable them to help clients solve problems related to sexuality. Instructor's consent required.

Equivalent to 212-760.

HDFL-764 Marriage and Family Therapy Prepracticum Seminar 1 cr.

Spring

Preparation for delivery of clinical services to couples and families and clinical management will be addressed. Students will also establish orientation to the clinical practice of marital and family therapy in a state-certified outpatient mental health, alcohol and other drug abuse clinic. Admission to the M.S. in Marriage and Family Therapy program.
Equivalent to 212-764.

HDFL-793 Marriage and Family Therapy Practicum I 4 cr.

Fall

Preparation for professional marriage and family counseling services through seminar discussions, observation, and supervised counseling experience. Instructor's consent required. Admission to the M.S. in Marriage and Family Therapy program.
Equivalent to 212-793.

HDFL-794 Marriage and Family Therapy Practicum II 4 cr.

Sequel to HDFL-793. Continuing preparation for professional marriage and family counseling services through seminar discussions, observation, and supervised counseling.
Equivalent to 212-794. P: HDFL-793.

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PSYC Psychology

PSYC-520 Psychology: Its History and Systems 3 cr.

Fall, Spring and Summer

History of psychology and influence of early competing schools of thought: structuralism, functionalism, behaviorism, Gestalt psychology, and psychodynamic psychology. Evolution to present as a diverse behavioral science with emphasis on neobehaviorism, humanistic psychology, and cognitive psychology.
Equivalent to 479-520.

PSYC-530 Psychology of Learning 3 cr.

Fall and Spring

A course designed to acquaint the student with the principles of learning drawn from experimental and theoretical psychology. These principles are demonstrated as they apply to animal and human learning. Modern viewpoints toward theories of learning are emphasized.
Equivalent to 479-530.

PSYC-535 Motivation and Emotion 3 cr.

Fall and Spring

An experimentally oriented introduction to the fundamental principles of motivation and emotion.
Equivalent to 479-535.

PSYC-540 Psychology of Individual and Group Differences 3 cr.

Fall and Spring

Nature and extent of differences if individuals and groups are studied. Intelligence, achievement, aptitudes, interests, attitudes, and general personality are the major differences included. Race, sex, nationality, social class and age in relation to individual differences are studied.
Equivalent to 479-540.

PSYC-551 Children's Social Reasoning 3 cr.

Fall and Spring

Focused, in-depth study of social reasoning from birth through late childhood. Empathy, friendship, altruism, multicultural perceptions, shyness, assertiveness, aggression, loneliness, morality, values, and global responsibility. Heredity/environment-based theories. Assessment tools and prevention and intervention programs.
Equivalent to 479-551.

PSYC-552 Adolescent Psychology 3 cr.

Fall, Spring and Summer

The physical, emotional, social, moral, and intellectual development of secondary school youth.
Equivalent to 479-552.

PSYC-561 Abnormal Psychology 3 cr.

Fall, Spring and Summer

A study of more serious mental disturbances. Emphasis on the growing importance of mental disorders and on their early detection and referral is studied.
Equivalent to 479-561.

PSYC-570 Interpersonal Effectiveness Training 2 cr.

Fall, Spring and Summer

Training in effective interpersonal communication attitudes and skills for creating healthy relationships including self-awareness/self-expression, understanding others's communication, assertive rights/responsibilities, dealing with difficult emotions, conflict management/resolution and mediation, collaborative problem solving and teamwork, and gender differences in communication style.
Equivalent to 479-570.

PSYC-571 Introduction to Health Psychology 3 cr.

Fall and Spring

Principles of psychology applied to the promotion of health and wellness; prevention of disease, injury and premature death; psychological treatment of illness; improvement of health care; and formation of health policies.

Equivalent to 479-571.

PSYC-575 The Psychology of Marriage and the Family 2 cr.

Fall and Spring

A study of the interpersonal relations involved in dating, mating and family collaboration with growing awareness of patterns for self-integration.

Equivalent to 413-571, 479-575.

PSYC-577 Consumer Psychology 3 cr.

Fall and Spring

Psychological principles and theories from the areas of motivation, perception, learning, attitude, information processing, personality, groups, organizational psychology, and environmental psychology are applied to the understanding of consumer behavior, consumer problems, and their solution.

Equivalent to 479-577.

PSYC-579 Public Relations 2 cr.

Fall, Spring and Summer

Introduction to public relations in industry and education including community relations, employee relations, customer relations, media relations, tools of public relations, two-way communications, and special publics.

Equivalent to 479-579.

PSYC-581 Industrial Psychology 2 cr.

Fall and Spring

Survey of the application of psychological principles of man's vocational pursuit. Emphasis is on individual differences and group behaviors which are involved in personnel selection, human factors engineering, industrial safety, motivation, personnel training, and consumer behavior. Course material is based primarily upon the latest behavioral science research in the field of industrial psychology.

Equivalent to 479-581.

PSYC-582 Human Resource Management 3 cr.

Fall, Spring and Summer

Organization and coordination of personnel practices and methods.

Consideration given to communication, employment, orientation and training, working conditions, supervision, performance evaluation, collective bargaining, salary administration, health and recreation.

Equivalent to 479-582.

PSYC-591 Applied Psychophysiological Methods 3 cr.

Theory, methods, laboratory procedures and applications of physiological responses to psychological stimuli.

PSYC-601 Workshop: Special Topics in Psychology 1-3 cr.

Current specialized topics studied in a small group setting utilizing experimental activities.

Equivalent to 479-601. R

PSYC-603 Management of Employee Reward Systems 3 cr.

Fall

Review of issues in the reward and compensation of employees and of systematic methods for the determination of employee wages, incentives and benefits. Psychological theories of motivation, external equity, job analysis, identifying compensable factors used in job evaluation, comparable worth and performance appraisal, individual salary determination.

Equivalent to 479-603.

PSYC-632 Perception 3 cr.

Fall

This course serves as an introduction to human perception. The content of the course is structured around an information processing model, with the sensory and memory facilities considered as information systems. The student will analyze perceptual research, become familiar with classical and modern psychophysical techniques and conduct experimentation in human information processing.

Equivalent to 479-632.

PSYC-642 Cognitive Processes 3 cr.

Fall and Spring

Cognitive theories of attention, memory, language, reasoning and problem solving with applications to fields of education, vocational rehabilitation, gerontology, forensic, clinical and counseling psychology.

PSYC-655 Myers-Briggs Type Indicator 3 cr.

Principles of Carl Jung's theory of psychological type are explored with the Myers-Briggs Type Indicator (MBTI). Applications in personal, interpersonal and organizational development; teaching/training and learning styles; collaborative problem solving; conflict; stress and time management.

Equivalent to 479-655.

PSYC-673 Psychology of Stress 2 cr.

Fall, Spring and Summer

Nature of stress and stress-related diseases, stress in daily life, techniques for managing stress, and plans for reducing stress in personal and professional life.

Equivalent to 479-673.

PSYC-675 Right Brain 2 cr.

Spring and Summer

The two hemispheres of the human brain. Exploration and experience in right hemisphere modes of consciousness, through techniques such as meditation, hypnosis, drawing, guided imagery and dreaming.

Equivalent to 479-675.

PSYC-679 Advanced Public Relations 2 cr.

Fall and Spring

Practice in planning and directing specific public relations programs, using the case problem approach.

Equivalent to 479-679, 479-779.

PSYC-685 Recruitment and Selection of Human Resources 3 cr.

Fall and Spring

In-depth examination of the processes involved in the design and implementation of procedures for selecting employees; the impact these procedures have on the organization; and recruitment, job analysis, testing methods, legal issues, selection strategies, career development.

Equivalent to 479-685.

PSYC-690 Psychological Measurement 3 cr.

Fall and Spring

An introduction to the assumptions, models and applications of measurement techniques in behavioral science. Test analysis, item analysis, reliability, and validity are extensively covered. The course also introduces the student to prediction and measurement of attitudes and opinions.

Equivalent to 479-690.

PSYC-693 Field Practicum in Public Relations Specialization 1-3 cr.

Fall, Spring and Summer

Opportunity to apply public relations principles in a practical setting. All coursework for the public relations specialization must be completed prior to the practicum that serves as a capstone for the specialization. Both setting and job description must be approved by the faculty supervisor.

Equivalent to 479-693. R

PSYC-701 Seminar on Diversity in the Workplace 1 cr.

Spring

Application of problem solving skills and strategies to issues regarding diversity in the context of applied psychology.

Equivalent to 479-701.

PSYC-702 Ethics in Applied Psychology 1 cr.

Fall, Spring and Summer

Ethical principles and codes of conduct for psychologists, with application to worksettings by applied psychologists. Consideration to ethical codes of conduct in various professions, and the role of culture, personality and social factors, and major life events in conceptualizing ethical standards.

Equivalent to 479-702.

PSYC-707 Applied Social Psychology 3 cr.

Fall, Spring and Summer

Principles and methods derived from social psychology applied to problems and issues in a variety of settings.

Equivalent to 479-707.

PSYC-708 Psychosocial Intervention 3 cr.

Spring

Theories and methods of planned change. Training of effective change agents.

Equivalent to 479-708.

PSYC-710 Applied Psychology Seminar 3 cr.

Fall

Current issues in applied psychology as they interrelate with content and skills in the areas of I/O psychology, program evaluation, and health psychology.

Independent or group research involving problem identification, review of literature, compilation of bibliography, plan of methods, conduct of research, interpretation of findings, and preparation of the final paper according to APA standards and presentation of report.

Equivalent to 479-710.

PSYC-730 Advanced Psychology of Learning 2 cr.

Fall, Spring and Summer

The theories and principles of learning are studied with emphasis upon totalistic models of classroom learning.

Equivalent to 479-730.

PSYC-750 Principles of Program Evaluation I 3 cr.

Fall

Examination of program evaluation processes with an emphasis on quantitative research methods. Examines the historical, ethical, and political nature of program evaluation. Skill development in evaluability assessments, evaluation design, data collection and analysis, contracting, ethics and communication of evaluation findings.

P: PSYC-790.

PSYC-751 Principles of Program Evaluation II 3 cr.

Advanced program evaluation skills and practices building on Principles of Program Evaluation I. Further examines evaluation theory, evaluation design, data collection, data analysis, and communicating evaluation findings.

Introduces advanced quantitative and fundamental qualitative techniques utilized in conducting a supervised field evaluation project.

P: PSYC-750, PSYC-790.

PSYC-760 Personality 2 cr.

Fall, Spring and Summer

The nature of personality and the conditions which make for its wholesome development, its maintenance, and integration is studied. Personality inventories used for self-analysis are also studied.

Equivalent to 479-760.

PSYC-763 Marriage and Family Therapy Prepracticum Seminar 1 cr.

Fall and Spring

An introduction to the clinical practice of marital and family therapy in a state certified outpatient mental health, alcohol and other drug abuse clinic.

Preparation for delivery of clinical services to couples and families and clinic management. Admission to the M.S. in Marriage and Family Therapy program.

Equivalent to 479-763, 413-763.

PSYC-765 Psychology of the Adult Learner 2 cr.

Fall

Application of contemporary perspectives in adult psychology to adult learners, primarily in employment settings. Specific strategies for trainers of adult learners, with consideration of gender, cultural, and racial factors. Group and individual differences, organizational dynamics, motivational factors, and disabilities are addressed.

Equivalent to 479-770.

PSYC-771 Advanced Health Psychology 4 cr.

Fall

Theoretical and applied issues related to the psychology of health, focused around five broad areas: the biological, social, psychological basis of health and disease; health policy; and health assessment and intervention. An ecological perspective will be provided for an integrative of health and disease from a multi-dimensional standpoint.

Equivalent to 479-771.

PSYC-781 Advanced Industrial Psychology 3 cr.

Fall and Spring

Topics of research and applications in industrial/organizational psychology ranging from issues of personnel selection and assessment to more macro

issues of organizational design and behavior. Applications of social and differential psychology in industry consistent with recent behavioral science research and applications. Instructor's consent required.
Equivalent to 479-781.

PSYC-790 Applied Research Design in Psychology 3 cr.

Fall, Spring and Summer

Intermediate level assessment of research designs to solve applied problems in psychology. Critical analysis of the problem, development of a conceptual framework, negotiation of research purposes, selection of designs and data analysis methods. Includes computer applications, testing and interpretation. Instructor's consent required.

Equivalent to 479-790.

PSYC-791 Research for Decision Making 3 cr.

Spring

Collection, processing, analysis, interpretation, presentation and dissemination of applied research for making organizational decisions.

Equivalent to 479-791.

PSYC-793 Marriage and Family Therapy Practicum 4 cr.

Fall

Preparation for professional marriage and family counseling services through seminar discussions, observation and supervised counseling experience.

Admission to the M.S. in Marriage and Family Therapy program.

Equivalent to 479-793, 413-793. P: HDFL-793.

PSYC-794 Marriage and Family Therapy Practicum 4 cr.

Spring

Sequel to PSYC-793. Continuing preparation for professional marriage and family counseling services through seminar discussions, observation and supervised counseling.

Equivalent to 479-794, 413-794. P: PSYC-793, HDFL-793, HDFL-794.

PSYC-835 Applied Psychology Field Problem 1-4 cr.

The investigation of a problem designed to include the planning, implementation and the evaluation of a feasible solution in an applied setting. Repeatable up to four credits. Advanced standing in the M.S. in Applied Psychology program.

Equivalent to 479-895. R

PSYC-850 Psychology of Development 3 cr.

Fall and Spring

Investigation of individual man, his natures and development with primary emphasis on the self and implications for education. Study aimed at analysis, synthesis, and evaluation levels through seminar approach.

Equivalent to 479-850.

PSYC-871 Applied Health Psychology 3 cr.

Research and health promotion applications of health psychology: health-care outcome assessment, epidemiology, health status measurement, and development of health-promotion and prevention programs. Analog experiential opportunities provided. Current professional issues in applied health psychology research and health promotion/prevention.
P: PSYC-771.

PSYC-875 Psychoeducational Intervention Practicum 3 cr.

Fall, Spring and Summer

Psychoeducational intervention strategies for promoting healthy individuals, families, organizations and communities. Designing, implementing, and evaluating psychoeducational learning experiences.
P: PSYC-708, PSYC-771, PSYC-871.

PSYC-890 Applied Psychology Internship 1-5 cr.

Supervised field experience in an applied psychology role involving the practice and integration of professional skills and knowledge developed in other courses. Repeatable up to five credits. Consent of program director. Advanced standing in the M.S. in Applied Psychology program.
Equivalent to 479-890. R

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MFT Marriage and Family Therapy

MFT-653 Couples Therapy and Communication Training 2-3 cr.

Fall

Theory and intervention that focuses on couples therapy and communication training. Application of skills to personal relationships and professional work.
Equivalent to HDFL-653, 212-653.

MFT-666 Alcoholism and Family Systems Intervention 2 cr.

Spring and Summer

The role of alcoholism in the family and how to intervene therapeutically.
Equivalent to PSYC-666, 479-666, 413-666.

MFT-740 Cultural Competence in Family Therapy 2 cr.

Fall

Cultural competence and its application to the various theories of family therapy and the family therapist.

MFT-744 Psychometric Aids to Marriage and Family Therapy 2 cr.

Fall

Instruction and practice in the administration and interpretation of tests appropriate for this area. Practice in treatment application of test results.

Equivalent to PSYC-744, 479-744, 413-744. P: SPSY-753.

MFT-765 Research in Psychotherapy 3 cr.

Fall, Spring and Summer

Basic research methods in the evaluation of therapy effectiveness. Application of research skills by demonstrating ability to critique published studies and to develop a research proposal.

P: COUN-723.

MFT-795 Marriage and Family Therapy Practicum 1-3 cr.

Fall, Spring and Summer

The study and application of family theory in a clinical setting. Admission to the M.S. in Marriage and Family Therapy program.

Equivalent to PSYC-795, 479-795, 413-795.

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COUN Counseling

COUN-600 Workshop in Counseling 1-3 cr.

Current specialized topics studied through experiential activities. Continuation of course 413-600. Equivalent to COUN-600, 439-600. R

COUN-647 Assessment and Treatment of Eating Disorders 2 cr.

Description and diagnostic criteria for anorexia nervosa, bulimia nervosa, obesity, and compulsive overeating. Psychological, sociological, and familial influences on the development of the disorders. Assessment instruments, approaches, and treatment considerations.

COUN-694 Counseling Older Persons 2-3 cr.

Spring Semester

Training service providers in counseling skills and gerontology through discussion, observation and supervised counseling experiences. Equivalent to

439-694, 413-694.

COUN-700 Seminar in Counseling 1-3 cr.

Special topics on current developments in the field. Each seminar is devoted to a specific development to be indicated with a subtitle and description.

Equivalent to 439-700. R

COUN-715 Orientation To Mental Health Counseling 2 cr.

Fall Semester

Professional, ethical, and legal issues in mental health and AODA counseling.

National and Wisconsin credential standards for mental health and AODA counseling practice. Regional mental health and AODA practice settings.

Public policy issues in mental health and AODA counseling. Equivalent to 439-715.

COUN-720 Psychopharmacology 2 cr.

Summer Session

Overview of abused street and prescription drugs and the legitimate use of psycho-pharmaceutical medicine. Fundamental concepts of neuroanatomy and neurochemistry. Medications for the treatment of substance abuse disorders and chronic pain management. Signs and symptoms of drug toxicity, drug interactions and side effects. Crisis intervention strategies.

COUN-721 Alcohol and Drug Abuse Treatment Programs 3 cr.

Spring Semester

Psychological factors in alcohol and drug abuse. Treatment programs and approaches used by alcohol and drug abuse counselors. Equivalent to 413-721, 439-721.

COUN-722 Advanced Substance Abuse Treatment 3 cr.

Fall Semester

Concepts of shame, substance abuse treatment, relapse prevention and intervention, dual diagnosis, clinical evaluation, family intervention, prevention, multicultural issues, symptom substitution, and other prominent special topics in the substance abuse field. Advanced skill development through extensive use of hypothetical problems and role-playing exercises. Ethical issues in substance abuse counseling. Equivalent to 413-718, 439-718, COUN-718.

Prerequisites: take COUN-721.

COUN-723 Psychopathology: Assessment and Treatment Planning 3 cr.

Fall Semester

Training in the use of the current edition of the diagnostic and statistical manual DSM for assessment of mental disorders; use of behavioral and psychometric assessment procedures; treatment planning. Equivalent to 413-723, 439-723.

COUN-725 Social and Cultural Issues in Counseling 3 cr.

Spring Semester

Major concepts, theoretical perspectives, professional issues, and skills of effective counseling related to such factors as culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, education, family values, religious and spiritual values, and socio-economic

status. Equivalent to COUN-725, 439-725, 413-725.

COUN-735 Problems in Counseling 2 cr.

Plan B investigations are the primary purpose of this course. Students who are ready to write their Plan B paper should register for this course and then confer with the major adviser to select a staff member who will serve as an investigation adviser. Meetings with the adviser are by arrangement only. Equivalent to 439-731. Prerequisites: take EDUC-740. \$

COUN-745 Treating Personality Disorders 1 cr.

Summer Session

Diagnosis, assessment, and treatment of personality disorders as defined in the current edition of the Diagnostic and Statistical Manual DSM. Underlying belief systems associated with the various personality disorders. Therapeutic strategies useful in working with individuals with personality disorders.

Prerequisites: take COUN-723.

COUN-750 Counseling Theory 3 cr.

Fall, Spring and Summer Semesters

History and theories of counseling and psycho- therapy: psychoanalytic, humanistic/existential, cognitive/behavioral, family systems, feminist, and others. Underlying personality theory. Integration and eclecticism in counseling practice. Illustrative practical applications. Integration of counseling theory into a personal counseling style. Equivalent to COUN-675, 439-675, 413-675.

COUN-752 Group Dynamics 2 cr.

Fall, Spring and Summer Semesters

Major concepts, theoretical perspectives, professional issues and skills related to effective group counseling. Stages of group development. Diversity issues and their effect on the group counseling process. Equivalent to 439-752, 413-752, 413-752. Prerequisites: take COUN-788.

COUN-754 Assessment Instruments For Mental Health Counselors 1 cr.

Instruments and procedures used for the assessment of behavior relevant to and appropriate for mental health counseling. Emphasis on the selection, interpretation, and application of major assessment instruments and procedures. Synthesis of assessment information into psychological reports. Prerequisites: take SPSY-753.

COUN-761 Counseling Children and Adolescents 3 cr.

Spring Semester

Concepts and developmental approaches to counseling with children and adolescents. Integration of culturally responsive strategies, identification of at-risk behavior and prevention, and strategies to work with parents and families.

COUN-770 Thesis 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for 2, 4, or 6 semester hours of credit in various terms with a final total of six. Consent of Program Director. Equivalent to 439-770. Prerequisites: take EDUC-740. R \$

COUN-775 Alcohol and Drug Abuse Counseling Practicum I 8 cr.

Fall Semester

Counseling under supervision in an alcohol and drug abuse treatment facility. Laboratory instruction on various aspects of alcohol and drug abuse treatment approaches. Equivalent to 439-775, 413-775. Prerequisites: take COUN-721 COUN-788.

COUN-776 Alcohol and Drug Abuse Counseling Practicum II 8 cr.

Spring Semester

A continuation of Alcohol and Drug Abuse Counseling Practicum I. Students will continue a supervised counseling experience in an appropriate treatment facility and related laboratory instruction. Equivalent to 439-776, 413-776.

Prerequisites:

take COUN-775.

COUN-788 Counseling Process Laboratory 3 cr.

Fall, Spring and Summer Semester

Basic attending and influencing skills used in the one-to-one and one-to-group situations involving laboratory experiences, such as counseling, feedback, critiquing, modeling, assessing and evaluating. Equivalent to 413-788, 439-788.

COUN-789 Cognitive-Behavioral Therapy: Principles And Application 3 cr.

Fall and Spring Semesters

Training in the theory and practice of cognitive- behavioral, and solution-focused treatment models. Assessment, intervention, and self-management strategies through this approach will be emphasized. Application of cognitive-behavioral techniques to human problems. Equivalent to 439-789, 413-789.

Prerequisites: take COUN-788.

COUN-794 Mental Health Counseling Internship 2-8 cr.

Fall, Spring and Summer Semesters

Minimum of 150 hours of supervised experience in a mental health or AODA setting for 2 credits. Applied professional experiences, including individual, group, marriage and/or family counseling; intake interviewing; diagnosis; psychological testing; treatment planning; consultation/outreach; referrals; and/or documentation. Prerequisites: take COUN-752 COUN-788 COUN-789.

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COUN-797 Mental Health Counseling Practicum 6 cr.

Fall and Spring Semesters

Minimum of 300 hours of closely supervised counseling experience in an appropriate mental health setting. Regular seminars and individual supervision sessions required. Equivalent to 439-797, 413-797.

COUN-892 Advanced Counseling Practicum 2 cr.

Clinical supervised counseling experiences in a variety of school institutional and agency settings. Designed to assist the student to more adequately understand and apply the dynamics of human behavior in the one-to-one

counseling
relationship. A minimum of 60 to 90 clock hours of experience is required.
Equivalent to 439-892. Prerequisites: take COUN-797. R

COUN-895 Field Study 2-6 cr.

Experience in action-type field research in pupil personnel services. The student will identify and research a topic directly related to his career position. Preparation and presentation of a formal report of the study to appropriate personnel. Student may enroll for 2, 4, or 6 semester hours of credit in various terms with a final total of six. Equivalent to 439-800. R \$

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REHAB Vocational Rehabilitation

REHAB-500 Special Topics in Rehabilitation 1-2 cr.

Special topics not available through regular courses. Instructor's consent required. Equivalent to 459-500. R

REHAB-500G Grantsmanship in the Helping Professions 1-2 cr.

Summer Session
Explor grant writing in human service occupations and the necessity for such proposals as an element of change in society. Methods used to seek funding sources and evaluate requests for proposals. Equivalent to 459-500G.

REHAB-500M Psychophysiological Approaches to Chronic Muscle

Problems in Community-Based Rehabilitation Services 1 cr.

To enable individuals to develop skills in several psychological and somatic treatments for problems of chronic muscle tension in athletic settings.
Equivalent to 459-500M. \$

REHAB-500N Community-Based Rehabilitation Services 1 cr.

An examination of national priorities for community-based services designed to enhance competitive employment options for severely disabled persons.
Equivalent to 459-500N.

REHAB-505 Sign Language I 3 cr.

Fall Semester

Basic course in manual communication with persons who are deaf. Intensive practice in expressive and receptive communication. Equivalent to 459-505.

REHAB-506 Sign Language II 3 cr.

Spring Semester

Intermediate course in manual communication with persons who are deaf. American sign language, increasing sign vocabulary and communication speed. Equivalent to 459-506. Prerequisites: take REHAB-505.

REHAB-509 Introduction To Biofeedback 3 cr.

Spring Semester

Theory and applications of biofeedback in psychology, rehabilitation, medicine and education; in-depth review of the field; appropriate uses of biofeedback as a referral possibility; preparation for supervised clinical biofeedback experience. Equivalent to 459-509.

REHAB-520 Rehabilitation and Chemical Dependency 3 cr.

Spring Semester

Chemical use and abuse with emphasis on the rehabilitation of persons who are chemically dependent and the historical and sociological implications of drug usage. Equivalent to 459-520.

REHAB-521 Rehabilitation of Public Offenders 3 cr.

Fall Semester

Emphasis on programs designed to rehabilitate persons who are public offenders and sociological issues connected with the judicial system. Equivalent to 459-525.

REHAB-527 Psychiatric Rehabilitation 3 cr.

Fall Semester

Goals and processes of psychiatric rehabilitation. Knowledge and application of skills for integrating diagnosis into planning and intervention with a focus on rehabilitation services for individuals with long-term mental illness in community-based settings.

REHAB-533 Adolescent Substance Use and Abuse 2 cr.

Summer Session

Major concepts, current trends, and culturally sensitive approaches in the assessment, prevention and treatment of adolescent alcohol and drug addiction. Equivalent to REHAB-500B, 459-500B.

REHAB-550 Independent Living 2 cr.

Fall Semester

An overview of independent living programs in this country including evolution, goals, methods of service delivery, and management of the independent living program. Equivalent to 459-550.

REHAB-555 Rehabilitation of the Older Disabled Worker 2 cr.

Develop awareness and understanding of older disabled workers with a focus on implementing rehabilitation planning that enables continued participation in the work force or reinsertion into it following disability. Equivalent to 459-555.

REHAB-560 Assistive Technology 2 cr.

Fall and Spring Semester

Provision of technology to enhance the lives of persons with disabilities. Delivery system, legislation, and issues related to funding are examined. Specific applications in communication, computers, mobility, and workstations and other technologies are reviewed. Equivalent to 459-560.

REHAB-565 Laboratory in Rehabilitation Technology 2 cr.

Spring Semester

Experience utilizing technological aids/devices developed for persons with disabilities. Modify/adapt equipment to meet specific functional requirements.

Construct switch/control mechanisms for equipment. Develop prototype solutions to vocational and independent living problems. Equivalent to 459-565. Prerequisites: take REHAB-360.

REHAB-602 Management of Non-Profit Organizations 3 cr.

Spring Semester

Principles and practices in the operation of non-profit organizations. Comparison of how non-profit and for-profit operations are affected by organizational structures and authority, budgeting practices, sources of income, personnel issues, strategic planning and program evaluation, and marketing. Application to community agencies. Equivalent to 459-602.

REHAB-620 Psychological Testing People With Exceptional Needs 2-3 cr.

Fall, Spring and Summer Semesters

Use of common psychometric tests with specific emphasis on selection, evaluation, administration, scoring, and interpretation of standardized tests for individuals who are disabled, including those from various ethnic and cultural groups. Equivalent to 459-610.

REHAB-659 Workforce Development, Disability, and Socioeconomics 3 cr.

Macro/micro influences that keep people unemployed and underemployed, including community, services, providers, employers, and families. Interface among legislative initiatives, disability, and life/work. Policy, strategies, and skills that promote effective intervention and change. Intended for professionals in the field.

REHAB-660 Rehabilitation in the Private Sector 3 cr.

Spring Semester

Case coordination to support maximum medical recovery and/or vocational rehabilitation of an injured person involved in insurance funded cases. Differences between public and private rehabilitation processes. Interviewing, planning, assessing transferable skills, placing in suitable work, and communicating with other involved individuals. Business practices, professional roles, and ethical issues. Equivalent to 459-601.

REHAB-661 Forensics For the Human Service Professional 2 cr.

Spring Semester

Terminology and practices associated with forensics for human service professionals. Strategies and materials related to preparation for testimony and expert witness testimony in a court of law and other legal settings. Equivalent to 459-661.

REHAB-662 Disability Management in Business and Industry 3 cr.

Fall Semester

Orientation to workers with disabilities in business and industry. Focus is upon the elimination of attitudinal and environmental barriers as they pertain to hiring, productivity, and retention of workers with disabilities. Governmental requirements, linkage between business, community resources, and rehabilitation. Equivalent to 459-587.

REHAB-670 Work Adjustment Services 2-3 cr.

Fall and Summer Semester

Principles and procedures of adjustment services. Emphasis upon the change and improvement of behavior. Supervised practical experience in interviewing, behavior observation, individual work adjustment planning, lesson plan and report writing. Equivalent to 459-670.

REHAB-681 Application of Theories in Rehabilitation Counseling 3 cr.

Fall, Spring and Summer Semesters

Major theories and techniques used in rehabilitation counseling. Development of skills in the use of basic counseling techniques with individuals who are disabled and including those from various ethnic and cultural groups. Equivalent to 459-680.

REHAB-682 Sexuality and Disability 2 cr.

Investigate sexuality as an integral part of the disability experience. Explore programs, techniques and personal biases in relation to sexuality of persons with disabilities. Equivalent to 459-682.

REHAB-683 Vocational Counseling Issues 2 cr.

Summer Session

Theoretical and applied approaches to vocational counseling and current research in vocational choice and career development as related to vocational counseling.

REHAB-688 Developing Collaborative Partnerships 3 cr.

Fall Semester

Development of professional relationships that are characterized by collaboration and respect for the consumer or student. Role of team members including human service professionals, consumer student, family members, school personnel, and community organization staff in collaborative decision making. Enhanced service delivery responsiveness through application of collaborative principles.

REHAB-700 Seminar--Vocational Rehabilitation 1-2 cr.

Spring

A seminar course devoted to the field of vocational rehabilitation and subject materials pertinent to the field. Equivalent to 459-700.

REHAB-701 Foundations of Rehabilitation 3 cr.

Fall Semester

Foundations of rehabilitation including its philosophical foundation, historical development, organization; professional roles, responsibilities, and practices; and future trends. Equivalent to 459-701.

REHAB-705 Practicum in Rehabilitation Leadership 3 cr.

Practical experience in leadership within rehabilitation organizations. Leaders' roles may be demonstrated through experiences in fiscal management, human resource management, strategic planning, staff development, contract negotiations and production management. Equivalent to REHAB-705, 459-705.

REHAB-707 Practicum in Vocational Evaluation 4 cr.

Fall Semester

A supervised experience that integrates vocational evaluation course material. The student will plan, conduct and communicate findings of comprehensive vocational evaluations with consumers who are disabled. Equivalent to 459-707. Prerequisites: take REHAB-620, REHAB-717, REHAB-723, REHAB-724; minimum grade B.

REHAB-708 Practicum in Rehabilitation Counseling 3 cr.

150 hours of supervised clinical experience in a rehabilitation setting. The student will perform entry-level duties of a rehabilitation counselor. Equivalent to 459-708.

Prerequisites: take COUN-750; minimum grade B.

REHAB-713 Aspects of Disability: Physical Disabilities 3 cr.

Fall Semester

Study of major physical disabilities including medical aspects and the psycho-social and vocational implications. Will cover the existence, onset, severity, progression and expected duration of disabilities. Equivalent to 459-703, 459-713.

REHAB-714 Aspects of Disability: Cognitive 3 cr.

Spring Semester

Major cognitive and psychiatric disabilities and their medical, psycho-social, and vocational implications. Incidence, onset, severity, progression and expected duration mental retardation, learning disability, mental illness, brain injury and disease. Equivalent to 459-714.

REHAB-717 Occupational Analysis and Job Placement 3 cr.

Fall Semester

Application of occupational analysis, career information, and placement concepts to the practice of job placement of persons with a disability. Includes job development/search techniques and the nature and critical impacting factors of the placement process. Equivalent to 459-717.

REHAB-723 Procedures of Vocational Evaluation 3 cr.

Spring Semester

Basic philosophies, practices, and processes of vocational evaluation applied to individuals with disabilities. Knowledge of specific assessment tools/instruments and application of clinical skills needed to analyze relevant information for program and career planning, identify significant behaviors, interpret findings to others and communicate assessment result. Equivalent to 459-723.

REHAB-724 Laboratory in Vocational Evaluation 3 cr.

Spring Semester

Application of the procedures and utilization of the tools of vocational evaluation including interviews, individual evaluation plans, standardized tests, vocational counseling, work samples, situational assessments, work-related behavioral observations. Interpret and communicate findings in a comprehensive vocational evaluation report. Equivalent to 459-724. Corequisite courses: REHAB-723.

REHAB-735 Problems in Vocational Rehabilitation 2 cr.

Identification, selection, and completion of a problem in vocational rehabilitation. The problem project will culminate in a Plan B paper. Intervention focusing on the family as the consumer of rehabilitation services. Equivalent to 459-755. Prerequisites: take EDUC-740. \$

REHAB-764 Case Coordination 3 cr.

Fall Semester

Concepts and philosophy of the case coordination in rehabilitation applied to various employment settings. Integration of consumer case study data, identification of service need and plan development. Equivalent to 459-764. Prerequisites: take REHAB-713 REHAB-714.

REHAB-770 Thesis -- Vocational Rehabilitation 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for 2, 4, or 6 semester hours of credit in various terms with a final total of six. Consent of Program Director. Equivalent to 459-770. Prerequisites: take EDUC-740. R \$

REHAB-780 Administration in Vocational Rehabilitation 2 cr.

A lecture course covering the administrative aspects and methods involved in establishing and supervising a vocational evaluation unit or a total rehabilitation facility. Admission To MS Voc Rehab. Equivalent to 459-780.

REHAB-783 Internship in Vocational Evaluation 6 cr.

A culminating practical experience using the tools and techniques of vocational evaluation to perform tasks of interviewing, planning, counseling, administering assessment tasks, observing, and reporting. Must be M.S. Degree Candidate. Equivalent to 459-783. Prerequisites: take REHAB-707; minimum grade B.

REHAB-785 Internship in Rehabilitation Leadership 6 cr.

Fall, Spring and Summer Semesters

A culminating practical experience in providing leadership to accomplish organizational goals. Tasks in fiscal, personnel, program development, fund raising, production, marketing, and contract procurement. Must be a M.S. degree candidate. Must be M.S. Degree Candidate. Equivalent to REHAB-785, 459-785. Prerequisites: take REHAB-7058896; minimum grade B.

REHAB-787 Internship in Rehabilitation Counseling 6 cr.

Fall, Spring and Summer Semester

Culminating practical experience in rehabilitation counseling performing tasks from intake to discharge and/or placement. Application of history, philosophy, and structure of rehabilitation delivery systems; counseling to individuals, groups, and/or families; vocational and career development; assessment, planning and case management; and job development, placement, and retention. Must be M.S. Degree Candidate. Equivalent to 459-787. Prerequisites: take COUN-788 or REHAB-708; minimum grade B. R

REHAB-798 Field Experience in Rehabilitation 1-2 cr.

Off-campus work and study in an approved position to better understand the challenges and potentials of various rehabilitation type careers. Equivalent to

459-798. R

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CTEM College of Technology, Engineering and Management

CTEM-500 Introduction to Futures Study 2 cr.

Fall

Methods of future projection, orienting thought toward future alternatives; impact of future problems on major areas of human activity.

Equivalent to 100-500.

CTEM-590 Technical Service Schools .5-6 cr.

Summer

Some special-purpose technical courses offered by manufacturers are suitable for college credit. Guidelines: 1) Student makes all arrangements with manufacturer offering courses; 2) One credit is awarded for each full week (40 hours) of attendance; 3) Student enrolls and pays fees prior to taking course; 4) Approval of dean of the College of Technology, Engineering and Management needed before enrolling for credit; 5) Graduate School approval required for students taking course for graduate credit.

Equivalent to 100-590. R

CTEM-801 Internship 1-6 cr.

Interrelated research and experience in a work- based environment. Rapid technological advances and the changing workplace require updated work experience for instructors in technical areas. Serves students enrolled in the Indiana State University consortium-delivered Ph.D. in Technology Management degree.

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BUACT Business Accounting

BUACT-546 Seminar 1-3 cr.

Current topics in business accounting. (Title will reflect specific content.)

Equivalent to BUMGT-546, 160-520, BULGL-546, BULGL-546, BUMGT-546, BUACT-546. R

BUACT-753 Managing Finance in the Hospitality Industry 3 cr.

Fall and Spring

Analytical skills needed to interpret and act upon financial data and information that lead to sound financial decisions for hospitality organizations. Capital budgeting methods, financial statement analysis, break even analysis, short and long-term financing methods, and cost controls.

Equivalent to HT-753.

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BUINB Business International Business

BUINB-538 International Logistics 3 cr.

Spring

International logistics strategy: customer service, inventory, transportation, packaging, warehousing, storage, exporting, licensure, joint ventures, ownership documentation, terms of trading, organization, financial and management skills.

Equivalent to 160-538.

BUINB-546 Special Problems in Hospitality and Tourism 3 cr.

Fall, Spring and Summer

Equivalent to HT-681. R

BUINB-567 International Management 3 cr.

Fall

Theory and practice of managing international organizations, including socio-cultural aspects and group dynamics of international businesses and service organizations.

Equivalent to 245-567, 160-567.

BUINB-685 International Marketing 3 cr.

Fall and Spring

Principles and policies of marketing goods and services in international markets. Concepts, strategies and policies of world trade and multinational firms.

Equivalent to 160-585.

BUINB-688 International Business Practicum 3 cr.

Fall and Spring

Assist an actual business in developing their international marketing plan. Students, under the supervision of a faculty member, determine a product's foreign marketability.

Equivalent to 160-588. P: BUINB-485.

BUINB-689 International Business Policies 3 cr.

Fall and Spring

Students develop the ability to solve business problems in the international arena using a scientific approach to decision making by studying business cases on international policy formulation and administration, manufacturing, marketing, finance, accounting, personnel and public relations functions.

Equivalent to 160-689.

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BULGL Business Legal

BULGL-546 Seminar 1-3 cr.

Current topics in business. (Title will reflect specific business content.)

Equivalent to BUMGT-546, 160-520, BULGL-546, BUMGT-546, BUACT-546, BUACT-546. R

BULGL-601 Legal Environment of Business 2 cr.

Fall and Spring

Changing relationship of government and industry: regulatory legislation, administrative agencies, national policies and social control.

Equivalent to 160-601.

BULGL-673 Legal Aspects of Construction 3 cr.

Fall

Analysis of contracts and documents used in building construction industry: rights of the parties. Labor relations: law and labor, legality of strikes, legality of picketing and boycott as economic pressure, unfair labor practices, employer and union, rights and responsibilities of supervisor and worker.

Equivalent to 160-573.

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BUMGT Business Management

BUMGT-546 Seminar 1-3 cr.

Fall, Spring and Summer

Current topics in business. (Title will reflect specific business content.)

Equivalent to 160-520, BULGL-546, BULGL-546, BUMGT-546, BUACT-546, BUACT-546. R

BUMGT-680 Entrepreneurship: Small Business Planning 3 cr.

Fall and Spring

Concepts, strategies, and applications involved in entrepreneurship. Profile of entrepreneurs and the risks and rewards, creating products and services for the market place, going into business<start-up, buy out, franchise<legal and financial aspects. Preparing a business plan required.

Equivalent to 160-535. P: BUMKG-330 BUACT-206 or BUACT-200.

BUMGT-690 Strategic Management and Business Policy 3 cr.

Fall and Spring

Integrates previous business studies, develops ability to solve business problems through scientific approaches to decision-making. Students use business cases on policy formulation and administration: manufacturing, marketing, finance, accounting, personnel, and public relations functions.

Equivalent to 160-690.

BUMGT-751 Strategic Management in Hospitality 3 cr.

Fall and Spring

Strategies used by hospitality managers and owners to achieve organizational objectives.

Equivalent to HT-751.

BUMGT-760 Corporate Planning 2 cr.

Fall and Spring

Introduction to corporate planning, strategy and policy. Orientation to generalized planning process and the outputs of planning system. A discussion of planning decision sub-system, strategic information sub-system, planning organizational sub-system and planning management sub-system. Instructor's consent required.

Equivalent to 150-760, 160-760.

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BUMIS Business Management Information Systems

BUMIS-546 Seminar 1-3 cr.

Current topics in business. (Title will reflect specific business content.) R

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BUMKG Business Marketing

BUMKG-639 Industrial Distribution Seminar 2 cr.

Spring

Culminating and synthesizing experiences in industrial distribution. Individual topics will vary from semester to semester reflecting the latest changes in the field.

Equivalent to 160-638.

BUMKG-679 Marketing Research 3 cr.

Fall and Spring

Experimental and survey techniques to secure information for successful marketing; primary and secondary sources; data collection, compilation and analysis methods; effective communication of conclusions and recommendations to management. First-level statistics required.

Equivalent to 160-679.

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BURTL Business Retail

BURTL-519 International Economic Trends in Textiles and Clothing 3 cr.

Fall and Spring

Economic importance of the textile and apparel industries in the United States and the world.

Equivalent to 214-519.

BURTL-522 Merchandising and Marketing an Apparel Line 2 cr.

Spring

Merchandising and marketing of product lines from manufacturer to retailer to consumer.

Equivalent to 214-522.

BURTL-527 Store Management 3 cr.

Fall and Spring

Develop management skills for retail stores of varying size.

Equivalent to 214-527.

BURTL-535 Special Topics in Retail Merchandising and Management 1-3 cr.

Fall, Spring and Summer

Equivalent to 214-535. R

BURTL-550 Marketing to Aging and Minority Consumers 2 cr.

Fall

Identify product and service needs of Native, African, Asian and Hispanic Americans, and aging consumers. Interpret demographic, psychological and cultural data of these special populations and develop merchandising strategies.

P: BUMKG-330.

BURTL-617 Social/Psychological Aspects of Clothing 3 cr.

Fall and Spring

Social and psychological influence of dress on individual and group behavior patterns.

Equivalent to 214-617.

BURTL-619 National Study Tour to the Fashion Industry 1 cr.

Fall and Spring

Five-day visit to New York or alternate city: study hours, discussions and lectures by leaders in American fashion market.

Equivalent to 214-639, 214-619, APRL-619. R

BURTL-625 Current Retail Strategies for a Differential Advantage 2 cr.

Fall and Spring

Comparative analysis of specific retail corporations¹ strategies to gain a differential advantage with their merchandising and operational methodology.

Equivalent to 214-625.

BURTL-626 Fashion Retailing Practicum 4 cr.

Fall, Spring and Summer

Observation and structured experience in merchandising procedures dealing with complete operations and management of retail establishment.

Equivalent to 214-626.

BURTL-631 Fashion Retailing Practicum 4 cr.

Fall and Spring

Analysis of modes of service. Planning strategies leading to quality implementation, utilizing extensive case studies.

Equivalent to 214-631, 150-631.

BURTL-690 Advanced Merchandise Planning Control 3 cr.

Fall and Spring

Application of merchandise theory and techniques to budget, manage, and adjust actual purchases, inventory, and sales of an actual retail business.

Equivalent to 214-630.

BURTL-735 Problems in Textiles, Clothing and Retail Marketing 2 cr.

Fall, Spring and Summer

Identification, selection and completion of a problem in textiles, clothing, and retail marketing culminating in a Plan B paper.

Equivalent to APRL-735, 214-768. P: EDUC-740.

BURTL-770 Thesis<Textiles, Clothing and Retail Marketing 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Consent of program director.

Equivalent to 214-770, APRL-770. P: EDUC-740.

BURTL-790 Seminar in Textiles, Clothing and Retail Marketing 2 cr.

Review, evaluation and interpretation of current research in textiles, clothing and retail marketing.

Equivalent to 214-790, APRL-790.

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CTE Career and Technical Education

CTE-501 Preservice Workshop For Career and Technical Educators 1 cr.

Introduction to the basic concepts of teaching courses in Wisconsin career, technical, and adult education. Equivalent to VTAE-501, 199-501.

CTE-502 Principles of Career and Technical Education 2 cr.

Fall, Spring and Summer Semesters

Philosophy, organization and administration of career, technical and adult education, nationwide, in Wisconsin, and on the local level. Equivalent to VTAE-502, 199-502, CTE-534.

CTE-534 Performance Analysis 3 cr.

Fall, Spring and Summer Semesters

Analysis techniques utilized in curriculum development. Emphasis on task analysis and related procedures. Includes occupational and needs analysis, competency identification, objective writing and information mapping. Integrates task analysis with a total system for developing and revising vocational curriculum or job training programs. Equivalent to VTAE-502, 199-502, CTE-502, VTAE-534, 199-534.

CTE-537 Competency-Based Education, Career and Technical 2 cr.

Fall and Spring Semesters

Competencies for career, technical and adult education programs and courses. Development of competency-based education performance indicators in all domains, a competency-based education management system, and basis for competency-based education evaluation. Equivalent to VTAE-537, 199-537.

CTE-546 Seminar 1-3 cr.

Fall, Spring and Summer Semesters

Current topics in career, technical and adult education with application for personnel in the field. Instructor's consent required. Equivalent to VTAE-546, 199-546.

CTE-559 Technology Impacts Occupational Programs 4 cr.

Summer Session

Presentation of latest technology in communications, manufacturing, construction, and/or transportation which involve concepts from math, science and computer science. Equivalent to VTAE-559, 199-559. R

CTE-560 Cooperative Occupational Education Programs 2 cr.

Spring and Summer Semesters

Philosophy, organization, coordination and teaching techniques or cooperative education programs in the various career and technical areas. Roles, responsibilities, duties of the cooperative teacher coordinator. Equivalent to VTAE-560, 199-560, 469-560.

CTE-575 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics providing hands-on or experiential learning activities. Specific

content and title to reflect the topic of the workshop. Equivalent to VTAE-575, VTAE-575, VTAE-575, 199-575.

CTE-598 Field Experience 1-2 cr.

Equivalent to VTAE-598, 199-598.

CTE-605 Methods of Teaching Career and Technical Education 2 cr.

Fall and Summer Semesters

Competency-based and individualized approach to methods of teaching career and technical education.

CTE-638 Course Construction For Career and Technical Educators 2 cr.

Fall and Summer Semesters

Competency-based and individualized approach to principles of course construction for career and technical educators.

Equivalent to VTAE-638, 199-638.

CTE-640 Instructional Evaluation in Career and Technical Education 2 cr.

Spring and Summer Semesters

Competency-based and individualized approach to instructional evaluation for career and technical educators. Equivalent to VTAE-640, 199-640, 199-740.

CTE-674 Adult Education 2 cr.

Fall Semester

Philosophy and history of adult education in the United States. Techniques for teaching adults: psychological factors, methods, adult interests and characteristics. Equivalent to VTAE-674, 199-674.

CTE-708 Issues in Career and Technical Education 2 cr.

Summer Session

An in-depth study of contemporary issues affecting career, technical and adult education. Possible solutions or alternatives will be proposed. Equivalent to VTAE-708, 199-708.

CTE-710 Coordination and Supervision of Career and Technical Education 2 cr.

Fall, Spring and Summer Semesters

Principles of coordination/supervision in career, technical and adult education. The coordinator/supervisory positions and their functional relationship to the career and technical education system. Equivalent to VTAE-710, 199-710.

CTE-735 Problems in Career and Technical Education 2 cr.

Identification, selection, and completion of a problem in career and technical education culminating in a Plan B paper. Equivalent to VTAE-735, 199-736.

Prerequisites: take EDUC-740. \$

CTE-737 Competency-Based Education -- Career and Technical 2 cr.

Fall

Competencies for career, technical and adult education programs and courses. Development of competency-based education performance indicators in all domains, a competency-based education management system, and basis for competency-based education evaluation. Equivalent to VTAE-737, 199-737.

CTE-746 Seminar 1-3 cr.

Special topics on current developments in the field. Each seminar devoted to a specific development to be indicated with sub-title and description. Equivalent to VTAE-746, 199-746.

CTE-770 Thesis--Career and Technical Education 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for 2, 4, or 6 semester hours of credit in various terms with a final total of six. Consent of Program Director. Equivalent to VTAE-770, 199-770. Prerequisites: take EDUC-740. \$

CTE-775 Workshop R 1-3 cr.

Special topics providing hands-on experiential learning activities. Specific content and title to reflect the topic of the workshop. Equivalent to VTAE-775, 199-775.

CTE-780 Internship, Career and Technical Education 4-8 cr.

Fall and Spring Semesters

A planned, supervised experience for M.S. or Ed.S. candidates. To be completed at selected locations capable of providing appropriate experiences. Consent of Program Director. Equivalent to VTAE-780, 199-780.

CTE-784 Internship -- Local Vocational Education Coordinator 4-8 cr.

Fall and Spring Semesters

Supervised field practice in local career and technical education coordination to be completed at selected schools or CESA agencies capable of providing appropriate experiences. Consent of Program Director. Equivalent to VTAE-784, 199-784.

CTE-792 Administration, Career and Technical Education 2 cr.

Career, technical and adult school operation, legal status, policy making staff personnel, student personnel, programs, public relations, physical plant, business management. Equivalent to VTAE-792, 199-792. Prerequisites: take CTE-710.

CTE-797 Field Experience 1 cr.

Equivalent to VTAE-797, 199-797.

CTE-798 Field Experience 1-2 cr.

Equivalent to VTAE-798, 199-798.

GCM Graphic Communications Management

GCM-500 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics in graphic communications, providing hands on or experiential learning activities. Specific content and title to reflect the topic of the workshop.
Equivalent to 130-500 R

GCM-562 Screen and Speciality Print Manufacturing 3 cr.

Fall and Summer

Applications and techniques for screen and specialty printing on a variety of substrates. Issues and process-control concerns related to these image transfer methods.

Equivalent to 130-562, 130-561. \$

GCM-563 Package Printing 3 cr.

Fall and Spring

Production of graphics on cartons, labels, and flexible packages. Present and future technological trends in packaging and printing, with an emphasis on flexography, rotogravure, and other processes for full color reproduction.

Equivalent to 130-563, 130-263. \$

GCM-643 Graphic Communication Integrated Manufacturing Practicum 3 cr.

Fall, Spring and Summer

Preparation and manufacture of actual printed products for clients in the university community emphasizing process and work flow management through estimating, scheduling, planning and quality control.

Equivalent to GCM-543, 130-543, GCM-653. R

GCM-645 Publications Production 3 cr.

Fall, Spring and Summer

Cross-discipline work teams experience integration of skills developed in English, speech, art, graphic communications, industrial management and business courses to design, plan, schedule, produce and distribute an actual magazine.

Equivalent to GCM-545, 130-545.

GCM-646 Digital Imaging 3 cr.

Fall and Spring

Preparation, capture and manipulation of digital information for current and emerging digital distribution technologies. Repurposing of print media files for alternative distribution systems.

Equivalent to GCM-546, 130-546.

GCM-680 Customer Service and Production Coordination for Print Media 3 cr.

Fall and Spring

Review of the graphic communications manufacturing process. The role and function of the customer service representative, workflow and time requirements for production of various print products.

Equivalent to 130-680.

GCM-695 Graphic Communications Management Seminar 3 cr.

Fall, Spring and Summer

Technological innovations, management and supervision issues, and emerging trends in the graphic communications industry.

Equivalent to GCM-595, 130-595. R

GCM-797 Field Experience 1 cr.

Fall, Spring and Summer

Equivalent to 130-797. R

GCM-789 Problems in Graphic/Telecommunications 2-6 cr.

Fall, Spring and Summer

Substantive study and activity for specialists in the graphic/telecommunications fields to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in graphic/telecommunications. Preparation of a technical report. May be repeated for a maximum of six semester credits.

Equivalent to TCS-798, 130-798. P: TECED-739. R

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**MEBE Marketing Education/Business
Education**

MEBE-555 Marketing and Business Education Seminar 2-3 cr.

Designed to update marketing and business education students on issues and trends in vocational business and marketing education.

Equivalent to 196-555. R

MEBE-611 Business Education Methods and Curriculum 5 cr.

Summer

Teaching methods and curriculum design for business educators. Emphasis on basic business subjects; business literacy and entry-level job preparation; issues and trends; microteaching; development of a competency-based basic business education curriculum unit.

Equivalent to MEBE-555, 196-555, 196-611.

MEBE-701 Issues in Vocational Marketing Education 2 cr.

An in-depth study of contemporary issues confronting vocational distributive education. Possible solutions or alternatives will be proposed.

Equivalent to 196-701.

MEBE-702 Improving Marketing Education Methods/Materials 2 cr.

Identification and analysis of instructional needs; design of instructional alternatives; selection and development of instructional packages; and the evaluation and validation of the resulting products in terms of student learning.

Equivalent to 196-702.

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MEDIA Media Technology

MEDIA-535 Film-History and Appreciation 3 cr.

Fall

Evolution of motion picture film as medium of mass communication and aesthetic expression; contributions of noted film producers.

Equivalent to 600-535, 120-535.

MEDIA-560 Introduction to Media in Education and Training 2

cr.

Fall, Spring and Summer

Use of media in education and training. Includes the production of media and instructional materials in print, video, computer-bases and multimedia formats. Equivalent to 120-560, 600-560.

MEDIA-570 Computer-Assisted Interactive Video 3 cr.

Summer

Design, production and evaluation of interactive video applications. Analysis of various hardware and software systems. Instructor's consent required. Equivalent to 600-570, 120-570.

MEDIA-600 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics in media technology providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. Equivalent to 120-600. R

MEDIA-605 Advanced Photography 2-3 cr.

Fall, Spring and Summer

Advanced monochromatic photography: aesthetics, advanced theory, view-camera techniques, studio lighting, materials and equipment selection, sheet-film processing, specialized processes and techniques. Equivalent to 600-605, 120-605. \$

MEDIA-612 Nature Photography 2 cr.

Fall, Spring and Summer

Fundamentals of camera techniques composition, aesthetics, exposure and light in relationship to animals, plants, water, weather and landscapes. Special emphasis on proper photographic equipment and field techniques for nature photography. Camera required. Equivalent to 600-612, 120-612. \$

MEDIA-630 Audio/Film Production Fundamentals 3 cr.

Fall and Summer

A survey of audio and video production fundamentals applied to the process of instructional communication. Equivalent to 600-630, 120-630.

MEDIA-640 Telecommunication Systems and Teleconferencing 2 cr.

Fall, Spring and Summer

Interactive teleconferencing techniques. Applications, effective utilization and cost- effectiveness of information distribution systems, including telephone, television, teletext, videotext, viewdata, cable TV, slow-scan TV, and

computers. Survey of transmission systems, including telephone lines, satellites, coaxial cable, microwave and fiber optics.
Equivalent to 600-640, 120-640.

MEDIA-645 Color Photography 2-3 cr.

Fall, Spring and Summer
Aesthetics, color theory, film selection, lighting, copy techniques, slide duplication, reversal and negative color film processing, and color printing.
Equivalent to 600-645, 120-645. \$

MEDIA-654 Small Format Video Production 1 cr.

Summer
Selection of small format video systems to meet varied production needs. Planning and shooting video programs using BETA or VHS camcorders or 8mm equipment. Participants must provide their own personal or institutional video equipment.
Equivalent to 600-654, 120-654.

MEDIA-710 Learning Technologies 3 cr.

Fall, Spring and Summer
Overview and selection criteria of instructor-led, computer-based, and distance learning systems for delivering content to trainees in the workplace. Includes the development of training materials in a variety of formats. Instructor's consent required. Computer literacy required.
Equivalent to 120-610. P: MEDIA-560.

MEDIA-716 Media Selection and Evaluation 3 cr.

Fall, Spring and Summer
Methods and procedures for identifying and using resources for selecting media materials and equipment for various instructional/training environments.
Equivalent to 120-716.

MEDIA-732 Planning Media Facilities 2 cr.

Summer
Planning physical facilities for media production and distribution centers; large group multi-media auditoria; small group instructional area; and mediated carrels. Consideration of technological and environmental factors. Emphasis on working relationships with architects.
Equivalent to 600-732, 120-732, 600-730. P: MEDIA-560. \$

MEDIA-735 Problems in Media Technology 2 cr.

Fall, Spring and Summer
Identification, selection and completion of a problem in audiovisual communications, culminating in a Plan B paper.
Equivalent to 600-722, 120-722. P: 421-740.

MEDIA-765 Practicum: Instructional Development 1-3 cr.

Fall, Spring and Summer

Experience for the media technology student seeking employment in business and industry.

Equivalent to 600-765, 120-765.

MEDIA-790 Seminar 1-3 cr.

Specific content is designed to upgrade the competencies and knowledge of the participants. Content for each offering will change to reflect the current state of the art in media technology.

Equivalent to 120-790.

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TCS Telecommunication Systems

TCS-500 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics in telecommunication systems, providing hands on or experiential learning activities. Specific content and title to reflect the topic of the workshop.

Equivalent to 130-500. R

TCS-504 Communications and Information Systems 1-3 cr.

Fall, Spring and Summer

Overview of the communications industry. Use of systems to create, process, transmit, receive and evaluate information.

Equivalent to 130-504.

TCS-505 Office Automation Technology 3 cr.

Fall, Spring and Summer

Automation information concepts and technology used in office including both communication, storage, and retrieval systems. Emphasis on cost effective selection and implementation problems.

Equivalent to 130-505.

TCS-506 Introduction to Telephony 2 cr.

Fall, Spring and Summer

Principles of current technologies, systems, and trends in telephone

communication systems design and applications.
Equivalent to 130-506.

TCS-507 Artificial Intelligence Applications in Business 2 cr.

Fall and Spring

Artificial intelligence applications in business and industry with emphasis on office information system characteristics and implementation.

Equivalent to 130-507.

TCS-540 Cisco Networking Academy Program: Instructor Fast Track 2 cr.

Summer

Fast-track option to prepare the instructor for teaching in the Cisco Networking Academic Program, meeting requirements for the Cisco Certified Academic Instructor (CCAI). Instructor's consent required. Must be Cisco CCNA certified.

TCS-541 Cisco Networking Academy Program: Instructor I 4 cr.

First of four-course sequence preparing instructors for teaching in the Cisco Networking Academy Program, meeting requirements for the Cisco Certified Academic Instructor (CCAI), and preparing for the Cisco Certified Network Associate (CCNA) examination. Instructor's consent required.

TCS-542 Cisco Networking Academy Program: Instructor II 3 cr.

Second in a four-course sequence preparing instructors for teaching in the Cisco Networking Academy Program, meeting requirements for the Cisco Certified Academic Instructor (CCAI), and preparing for the Cisco Certified Network Associate (CCNA) examination.

P: TCS-541.

TCS-543 Cisco Networking Academy Program: Instructor III 2 cr.

Third in a four-course sequence preparing instructors for teaching in the Cisco Networking Academy Program, meeting requirements for the Cisco Certified Academic Instructor (CCAI), and preparing for the Cisco Certified Network Associate (CCNA) examination.

P: TCS-542.

TCS-544 Cisco Networking Academy Program: Instructor IV 2 cr.

Fourth in a four-course sequence preparing instructors for teaching in the Cisco Networking Academy Program, meeting requirements for the Cisco Certified Academic Instructor (CCAI), and preparing for the Cisco Certified Network Associate (CCNA) examination.

P: TCS-543.

TCS-581 Data, Voice and Video Systems 3 cr.

Fall

Digital communication theory and application as applied to voice and data systems and the design and management of integrated networks.

Equivalent to 130-581.

TCS-582 Network Systems Design 3 cr.

Spring

Concepts from communication networks. LAN, MAN, WAN networks.

Introduction to LAN switching, ATM and virtual LANS. Designing and integration of LAN switching virtual networking and ATM into today's networks.

Equivalent to 130-582.

TCS-601 Telecommunications Policy and Regulations 3 cr.

Fall and Spring

Telecommunications policy and regulatory issues, standards and policy setting agencies for national and international markets.

TCS-641 Scalable Internetworks 3 cr.

One of three core courses for preparation for the Cisco CCNP and CCDP professional certification. Students will learn how to build scalable routable networks. Students are required to pass the associated Cisco certification examination. Must be Cisco CCNA certified.

TCS-642 Remote Access Networks 3 cr.

Fall and Spring

One of three core courses for preparation for the Cisco CCNP and CCDP professional certification. Build remote access networks to interconnect central sites to branch offices and home offices. Students are required to pass the associated Cisco certification examination.

P: TCS-641.

TCS-643 Multi-Layer Switched Networks 3 cr.

Fall and Spring

One of three core courses for preparation for the Cisco CCNP and CCDP professional certification. Build multi-layer switched networks. Students are required to pass the associated Cisco certification examination.

P: TCS-641.

TCS-644 Internetwork Troubleshooting 3 cr.

Fall and Spring

Specialization course for the Cisco CCNP professional certification. Students

will learn to troubleshoot internetworks. Students are required to pass the associated Cisco certification examination.
P: TCS-641, TCS-642, TCS-643.

TCS-645 Internetwork Design 3 cr.

Fall and Spring

Specialization course for the Cisco CCNP professional certification. Students will learn to design internetwork solutions. Students are required to pass the associated Cisco certification examination.

P: TCS-641 TCS-642 TCS-643.

TCS-681 Telecommunications Systems Administration 3 cr.

Fall

Issues and concerns required to manage telecommunications networks and contemporary problems.

Equivalent to 130-681.

TCS-797 Field Experience 1 cr.

Fall, Spring and Summer

Equivalent to 130-797. R

TCS-798 Problems in Graphic/Telecommunications 2-6 cr.

Fall, Spring and Summer

Substantive study and activity for specialists in the graphic/telecommunications fields to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in graphic/telecommunications. Preparation of a technical report. May be repeated for a maximum of six semester credits.

Equivalent to 130-798. P: TECED-739. R

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TECED Technology Education

TECED-525 Technology for Elementary School Children 2 cr.

Fall, Spring and Summer

Development, philosophy, objectives and course organization for industrial arts for the elementary schools. Suitable laboratory work in woods, metals, plastics and drawing.

Equivalent to 190-525.

TECED-530 Implementing Technology Education 3 cr.

Fall, Spring and Summer

Converts the theory of contemporary technology education programs into instructional materials, facilities, and strategy suited to the secondary and post-secondary school.

Equivalent to 190-530.

TECED-533 Planning Technical/Vocational Laboratories 2 cr.

School shop facility planning: equipment selection, placement, care and management.

Equivalent to 190-533.

TECED-540 Middle School Technology Education 2 cr.

Fall, Spring and Summer

Reviews trends and activities in the technology education movement to update instructors to teach middle school offerings.

Equivalent to 190-540.

TECED-575 Workshop: 1-3 cr.

Current specialized topics in industrial education through experiential activities. Instructor's consent required.

TECED-603 Activities in Technology/Vocational Education 2 cr.

A study and design of learning activities for industrial and vocational education. Learning activities will be developed on selected levels of the cognitive, psychomotor, and affective domains to carry out stated behavioral objectives. An evaluation of the appropriateness of learning activities as presented in contemporary curriculum projects.

Equivalent to 190-606.

TECED-631 Field Trips to Industry 1-3 cr.

Opportunities are provided for industrial and vocational education majors as well as teachers to accumulate information about industries through local and distant on-site visits to industries. A third credit may be earned by showing evidence of application of data collected in courses being taught.

Equivalent to 190-631. R\$

TECED-637 Organization/Management of Technical Laboratories 2 cr.

Summer

Experience in administration, project development and teaching problems associated with industrial education.

Equivalent to 190-637.

TECED-638 Course Construction 2 cr.

Spring and Summer

Directed experience in curriculum development and course of study construction for industrial education teachers; development of behavioral objectives and of instructional materials to help reach these objectives; development of course of study, instructional package/unit of instruction. Equivalent to 190-638.

TECED-704 History/Philosophy Technology Education 2 cr.

Fall and Summer

Evolution of modern industrial education through the people, movements, events and institutions that contributed to its formation. Developments and conditions in education and society also considered plus their relationship to the theory and practices of industrial education throughout the years. Equivalent to 190-704, 190-704.

TECED-708 Issues in Technology Education 2 cr.

Spring and Summer

A seminar dealing with selected current issues in industrial arts. Developments of abilities to develop a position and defend it, to be critical without being offensive, and to be professional in an emotional atmosphere. Equivalent to 190-708.

TECED-710 Curricular Innovations in Technology Education 2 cr.

Summer

Study of current innovative programs and practices in the teaching of industrial arts. Equivalent to 190-710.

TECED-735 Problems in Industrial/Technology Education 2 cr.

Fall, Spring and Summer

Identification, selection, and the completion of a problem in industrial education, culminating in a Plan B paper. Equivalent to 190-735. P: TECED-739, EDUC-740.

TECED-739 Introduction to Research in Vocational/Technology Education 1 cr.

Fall and Spring

Study of selection criteria for advanced technical problems in industry and technology, development of techniques appropriate to attacking these problems, identification of industries and organizations relating to these problems and preparation of a detailed proposal to explore a particular

problem. Students should enroll for this course during their first graduate enrollment and plan to take the appropriate "problems" course during their next enrollment.

Equivalent to 190-739.

TECED-746 Seminars in Technology Education 1-3 cr.

Identifying goals and outcomes for the local school; development of immediate and long-range curriculum plans; cooperating with local school administrative units in planning for improvement; use of the new Wisconsin curriculum guide for industrial education; initial preparation of individual courses of study for the local school program using behaviorally stated objectives.

Equivalent to 190-746.

TECED-770 Thesis Ç Industrial/Technology Education 2-6 cr.

Fall, Spring and Summer

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four or six semester hours of credit in various terms with a final total of six.

Equivalent to 190-770. P: EDUC-740.

TECED-775 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. R

TECED-798 Field Experience 1-2 cr.

Fall, Spring and Summer

Equivalent to 190-798.

TECED-895 Field Study in Industry and Technology 2-6 cr.

A study which provides the graduate student with the opportunity to: 1) explore in-depth the body of knowledge associated with his substantive teaching field in industry and technology, 2) provide an educational experience for implementing this knowledge into the classroom situation, and 3) devise methods to determine if this methodology has brought about desired behavioral changes.

Equivalent to 190-890.

TECH Technology

TECH-520 Technological Advances Ç Fast Forward I 2 cr.

Fall and Summer

Outlines industry's rapid advancements in high technology as utilized in the world today. Reference is made to a variety of applications of this technology now and in the future.

Equivalent to 195-520.

TECH-521 Technological Advances Ç Fast Forward II 2 cr.

Spring and Summer

Current applications of technology in today's society. Discusses how technological advances have affected educators through simulation, society through technological changes such as storing information, television communication and other new technological advances.

Equivalent to 195-521.

TECH-532 Futures of Technology 2 cr.

Fall

Concepts of future studies as applied to technology. Exploration of possible alternatives. Techniques and skills for the professional user and the citizen consumer.

Equivalent to 195-532.

TECH-540 Future of Work 1-2 cr.

Future possibilities as to why people work, who will work, and in what conditions. Project probable work parameters from current trends. Relate past, present, and future to students' individual work situations.

Equivalent to 195-540.

TECH-733 Impacts of Technology 2-3 cr.

Fall and Summer

A contemporary, historical and futuristic look at some of the economic, sociological, psychological and political implications of industry and technology. Students will identify and investigate several impacts of industry/technology to show depth of understanding and relationships between them.

Equivalent to 195-733.

TECH-775 Epistemology of Technology 3 cr.

Summer

The nature, sources, and parameters of knowledge, in this instance technology, and its relationship to other organized bodies of knowledge.

Equivalent to 195-775. R

TRHRD Training and Human Resource Development

TRHRD-560 Training Systems in Business and Industry 3 cr.

Summer

Types and purpose of training as related to business and industry. Training analysis, content, delivery systems, evaluation and justification for training. Designed for non-education majors.

Equivalent to 198-560.

TRHRD-570 Training Methods in Business and Industry 2 cr.

Fall, Spring and Summer

Identification of training situations where the development and delivery of training is needed. Emphasis is on methods to deliver a training session. Students will be required to make training sessions presentations.

Equivalent to 198-570.

TRHRD-575 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop.

Equivalent to 198-575. R

TRHRD-589 Training Internship 1-8 cr.

Fall and Spring

Opportunities for students to learn and practice training management and instructional techniques through activities and experiences in a training department. Objectives commensurate with student's background and field of training. Activities include designing and implementing training programs in student's major or minor field of study in either industry, business, military or government training programs.

Equivalent to 198-589. P: TRHRD-560. R

TRHRD-600 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics in training and human resource development providing hands-on or experiential learning activities. Specific content and title to reflect topic of the

workshop.
Equivalent to 198-600. R

TRHRD-730 Training Design and Evaluation 3 cr.

Fall, Spring and Summer

The systems approach to the design and evaluation of training modules in a business training context, including performance problem analysis, writing training objectives, conducting a training analysis, selection, design and evaluation of training methods, media and materials. Students design and evaluate a training module using principles taught in the course.

Equivalent to 198-730. P: TRHRD-560, VTAE-534.

TRHRD-735 Field Problem in Training and Development 4 cr.

Fall, Spring and Summer

Identification of a training and development research problem in business and industry. Review of related research, selection of appropriate methodology, completion of research procedures, analysis of results and formulation of conclusions, recommendations and implications for practice. Final product is a written research report.

Equivalent to 198-750. P: INMGT-700.

TRHRD-740 Management and Coordination of Training and Development 3 cr.

Fall, Spring and Summer

Principles and processes necessary to effectively manage and coordinate the training function in business and industry. Topics include strategic planning, responsibilities and tasks of managing training projects, facilities planning, legal and ethical considerations in training, and trends in the training and development field.

Equivalent to 198-740.

TRHRD-746 Seminar in Training and Development 1 cr.

Fall, Spring and Summer

Special topics on current developments in training and development. Each seminar is devoted to a specific issue to be indicated with subtitle and description.

Equivalent to 198-746. R

TRHRD-775 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop.

Equivalent to 198-775. R

TRHRD-789 Internship in Training and Development 2-8 cr.

Opportunities for students to use competencies in analyzing training needs, design training, delivering training and evaluating training in an organization.

Course objectives commensurate with student's knowledge, skills, experience and interests.

Equivalent to 198-789. P: VTAE-534, TRHRD-730, MEDIA-710. R

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CTE Career and Technical Education

CTE-501 Preservice Workshop For Career and Technical Educators 1 cr.

Introduction to the basic concepts of teaching courses in Wisconsin career, technical, and adult education. Equivalent to VTAE-501, 199-501.

CTE-502 Principles of Career and Technical Education 2 cr.

Fall, Spring and Summer Semesters

Philosophy, organization and administration of career, technical and adult education, nationwide, in Wisconsin, and on the local level. Equivalent to VTAE-502, 199-502, CTE-534.

CTE-534 Performance Analysis 3 cr.

Fall, Spring and Summer Semesters

Analysis techniques utilized in curriculum development. Emphasis on task analysis and related procedures. Includes occupational and needs analysis, competency identification, objective writing and information mapping.

Integrates task analysis with a total system for developing and revising vocational curriculum or job training programs. Equivalent to VTAE-502, 199-502, CTE-502, VTAE-534, 199-534.

CTE-537 Competency-Based Education, Career and Technical 2 cr.

Fall and Spring Semesters

Competencies for career, technical and adult education programs and courses. Development of competency-based education performance indicators in all domains, a competency-based education management system, and basis for competency-based education evaluation. Equivalent to VTAE-537, 199-537.

CTE-546 Seminar 1-3 cr.

Fall, Spring and Summer Semesters

Current topics in career, technical and adult education with application for personnel in the field. Instructor's consent required. Equivalent to VTAE-546, 199-546.

CTE-559 Technology Impacts Occupational Programs 4 cr.

Summer Session

Presentation of latest technology in communications, manufacturing, construction, and/or transportation which involve concepts from math, science and computer science. Equivalent to VTAE-559, 199-559. R

CTE-560 Cooperative Occupational Education Programs 2 cr.

Spring and Summer Semesters

Philosophy, organization, coordination and teaching techniques or cooperative education programs in the various career and technical areas. Roles, responsibilities, duties of the cooperative teacher coordinator. Equivalent to VTAE-560, 199-560, 469-560.

CTE-575 Workshop 1-3 cr.

Fall, Spring and Summer

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. Equivalent to VTAE-575, VTAE-575, 199-575.

CTE-598 Field Experience 1-2 cr.

Equivalent to VTAE-598, 199-598.

CTE-605 Methods of Teaching Career and Technical Education 2 cr.

Fall and Summer Semesters

Competency-based and individualized approach to methods of teaching career and technical education.

CTE-638 Course Construction For Career and Technical Educators 2 cr.

Fall and Summer Semesters

Competency-based and individualized approach to principles of course construction for career and technical educators.

Equivalent to VTAE-638, 199-638.

CTE-640 Instructional Evaluation in Career and Technical Education 2 cr.

Spring and Summer Semesters

Competency-based and individualized approach to instructional evaluation for career and technical educators. Equivalent to VTAE-640, 199-640, 199-740.

CTE-674 Adult Education 2 cr.

Fall Semester

Philosophy and history of adult education in the United States. Techniques for teaching adults: psychological factors, methods, adult interests and characteristics. Equivalent to VTAE-674, 199-674.

CTE-708 Issues in Career and Technical Education 2 cr.

Summer Session

An in-depth study of contemporary issues affecting career, technical and adult education. Possible solutions or alternatives will be proposed. Equivalent to VTAE-708, 199-708.

CTE-710 Coordination and Supervision of Career and Technical Education 2 cr.

Fall, Spring and Summer Semesters

Principles of coordination/supervision in career, technical and adult education. The coordinator/supervisory positions and their functional relationship to the

career and technical education system. Equivalent to VTAE-710, 199-710.

CTE-735 Problems in Career and Technical Education 2 cr.

Identification, selection, and completion of a problem in career and technical education culminating in a Plan B paper. Equivalent to VTAE-735, 199-736. Prerequisites: take EDUC-740. \$

CTE-737 Competency-Based Education -- Career and Technical 2 cr.

Fall

Competencies for career, technical and adult education programs and courses. Development of competency-based education performance indicators in all domains, a competency-based education management system, and basis for competency-based education evaluation. Equivalent to VTAE-737, 199-737.

CTE-746 Seminar 1-3 cr.

Special topics on current developments in the field. Each seminar devoted to a specific development to be indicated with sub-title and description. Equivalent to VTAE-746, VTAE-746, 199-746, 199-746.

CTE-770 Thesis--Career and Technical Education 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for 2, 4, or 6 semester hours of credit in various terms with a final total of six. Consent of Program Director. Equivalent to VTAE-770, 199-770. Prerequisites: take EDUC-740. \$

CTE-775 Workshop R 1-3 cr.

Special topics providing hands-on experiential learning activities. Specific content and title to reflect the topic of the workshop. Equivalent to VTAE-775, 199-775.

CTE-780 Internship, Career and Technical Education 4-8 cr.

Fall and Spring Semesters

A planned, supervised experience for M.S. or Ed.S. candidates. To be completed at selected locations capable of providing appropriate experiences. Consent of Program Director. Equivalent to VTAE-780, 199-780.

CTE-784 Internship -- Local Vocational Education Coordinator 4-8 cr.

Fall and Spring Semesters

Supervised field practice in local career and technical education coordination to be completed at selected schools or CESA agencies capable of providing appropriate experiences. Consent of Program Director. Equivalent to VTAE-784, 199-784.

CTE-792 Administration, Career and Technical Education 2 cr.

Career, technical and adult school operation, legal status, policy making staff personnel, student personnel, programs, public relations, physical plant,

business management. Equivalent to VTAE-792, 199-792. Prerequisites: take CTE-710.

CTE-797 Field Experience 1 cr.

Equivalent to VTAE-797, 199-797.

CTE-798 Field Experience 1-2 cr.

Equivalent to VTAE-798, 199-798.

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INMGT Industrial Management

INMGT-500 Engineering Economy 2-3 cr.

Fall, Spring and Summer

Source and application of funds: cost control, valuation, depreciation, replacement theory and taxation.

Equivalent to 150-500.

INMGT-501 Seminar 1-2 cr.

Fall, Spring and Summer

(Title will reflect specific business or management content.) Current topics in business and industrial management to meet specific needs of students enrolled.

Equivalent to 150-501. R

INMGT-502 Seminar 1 cr.

Fall and Spring

Elements of time management, strategies and techniques in industrial and business environments. Analysis of time use by all levels of management.

Equivalent to 150-502.

INMGT-505 Product and Inventory Control 3 cr.

Fall and Spring

Principles and techniques of minimizing cost of ordering, receiving, storing, issuing, scheduling, routing, dispatching, expediting, and controlling material, parts, sub-assemblies, and final assemblies of a manufacturing system.

Equivalent to 150-505.

INMGT-510 Production Processing 3 cr.

Fall and Spring

Production processes, especially product design as related to economic

production; factors that influence choice and sequence of process to obtain end product.

Equivalent to 150-510.

INMGT-514 Industrial Enterprise Practicum 3 cr.

Fall, Spring and Summer

Organization and operation of an industrial company; election, designing, production planning, production, marketing and distribution of a product.

Equivalent to 150-514.

INMGT-520 Quality Tools 3 cr.

Fall, Spring and Summer

Practical and statistical quality control in design and use of quality assurance programs: quality engineering, manufacturing quality assurance and product quality assurance.

Equivalent to 150-520.

INMGT-525 Quality Management 3 cr.

Fall, Spring and Summer

Provides the managerial and technical knowledge necessary to prepare, document, manage, and evaluate quality systems from beginning design through system operation and post-delivery customer services within a product or service environment.

Equivalent to 150-525.

INMGT-540 Time and Motion Study 1-3 cr.

Fall, Spring and Summer

Methods design and work measurement. Development of work methods by applying motion analysis, charting techniques, principles of motion economy, and work station design. Includes direct stopwatch methods, predetermined time systems, and standard data. Managerial implications for labor relations considered.

Equivalent to 150-540.

INMGT-550 Facilities Planning 3 cr.

Fall and Spring

Study of facilities location, structure, and planning for efficient layout and material handling systems.

Equivalent to 150-550.

INMGT-560 Benchmarking in Business and Industry 1 cr.

WinTerM

Theory, benefits and procedures of successful benchmarking, including the related legal and ethical issues.

Equivalent to 150-560.

INMGT-565 Project Management 2 cr.

Spring

Planning, scheduling, and control of technical projects. Topics covered include activity identification, network diagrams, scheduling, PERT/CPM, cost analysis, resource management, and computer control.

INMGT-600 Organizational Leadership 3 cr.

Fall, Spring and Summer

Overview of the leader's role in accomplishing organizational objectives through the management of human resources. Concepts of organizational and individual behavior serve as a foundation for the development of such leadership skills as communication, motivation, initiating change, team building, delegation, building credibility, and conflict management.

Equivalent to 150-600.

INMGT-601 Management Consulting 2 cr.

Fall and Spring

The organization and analysis of major elements of the consulting profession in management: 1) subject matter expertise, 2) marketing, 3) organizational development, 4) business principles for consultants and 5) communication skills; synthesis of the interdependent relationship of the major elements in the consultation process.

Equivalent to 150-601.

INMGT-605 Production and Inventory Control Practicum 2 cr.

Application of principles and techniques learned in INMGT-505 as part of Professional Semester/Manufacturing Laboratory.

Equivalent to 150-605. P: INMGT-505.

INMGT-615 Women and Minorities in Management 2 cr.

Fall

An examination of current status of women and minorities in management positions such as managerial styles of women and minorities, specific leadership techniques, and changing and leading organizations to minimize discrimination.

Equivalent to 150-615.

INMGT-616 People Process Organization Cultures 2 cr.

Fall and Spring

A study of high performing people process culture organizations integrating sociology, applied psychology, and organization behavior subject matter areas.

P: INMGT-600 or PSYC-582.

INMGT-620 Quality Assurance Practicum 4 cr.

Application of principles and techniques learned in INMGT-520, as part of Professional Semester/Manufacturing Laboratory.
Equivalent to 150-620. P: INMGT-520.

INMGT-630 Employee Involvements: Work Teams 2 cr.

Summer

Background and history of employee involvement, teams as a method of employee involvement, analysis of the advantages and disadvantages of different team structures and the planning processes used to implement team structures, analysis of situational variables used to help design the best team approach for an organization, the support systems needed to maintain teams, phases of team facilitation skills, and team problem-solving methods.
Equivalent to 150-630.

INMGT-660 Industrial Management 2 cr.

Summer

Principles and methods of analyzing and solving industrial problems; application through case studies, management games and special problems.
Equivalent to 150-660.

INMGT-685 Production Management Practicum 2 cr.

Fall and Spring

Application of principles and techniques of analyzing and solving production management problems learned in prior course work to manufacturing project in manufacturing laboratory. Instructor's consent required.
Equivalent to 150-680.

INMGT-700 Systems Analysis and Design 3 cr.

Fall and Spring

A survey of design approaches to industrial research. Application of appropriate research tools to analyze and design jobs, organization, operating systems and product/market studies.
Equivalent to 150-700.

INMGT-705 Enterprise Resource Planning 3 cr.

Spring

Systems management of enterprise resource planning software used to integrate corporate functional areas. Modules, databases, and system architecture of the software. Assessment, selection, planning, implementing and managing enterprise systems. Instructor's consent required.

INMGT-710 Seminar in Industrial Operation 2 cr.

Fall and Spring

Discussion of current theory and practice of operation of engineering, marketing, manufacturing, financial administration and industrial relations aspects of

industry. These integrated systems will be analyzed based upon the management of objectives concept.
Equivalent to 150-710.

INMGT-720 Foundations in Industrial Operations 2 cr.

Fall, Spring and Summer

This course is designed to improve the student's competencies in all aspects of industrial technology. A major professor will be identified who will serve as a tutor in guiding the student's self-development program. There will be a culminating matriculation to candidacy examination to assure minimum proficiency standards.
Equivalent to 150-720.

INMGT-730 Advanced Technical Problems Industrial Management 2-6 cr.

Fall, Spring and Summer

Advanced study in industrial management, management control, product development or process and facility planning. Recent developments, advanced technical work, experimental work and technical reports. A specific problem area for study in this course must be identified by the student prior to registering for this course.
Equivalent to 150-730.

INMGT-735 Problems in Management Technology 2-4 cr.

Fall, Spring and Summer

Identification, selection and completion of a problem in management technology culminating in a Plan B paper. Admission to the M.S. in Management Technology.
Equivalent to 150-780, 150-790.

INMGT-740 Introduction to Decision Theory 3 cr.

Spring

Application of quantitative methodology to the solution of industrial problems.
Equivalent to 150-740.

INMGT-750 Organizational Development 3 cr.

Summer

Change agent skills for middle managers and external consultants to facilitate organizational health. Assessment, diagnosis, intervention, team building, and coaching of key organization personnel. Emphasis on practical methods for the development of various types of organizations.
Equivalent to 150-750. P: INMGT-600 or INMGT-400.

INMGT-797 Field Experience 1 cr.

Fall, Spring and Summer

Equivalent to 150-797.

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RC Risk Control

RC-501 Seminar 1-2 cr.

Fall and Spring

(Title will reflect specific business or management content.) Current topics in business and industrial management to meet specific needs of students enrolled.

Equivalent to 140-501. R

RC-571 Alcohol, Drugs and Accident Prevention 3 cr.

Impact of alcohol and drug use on accident prevention programs; current efforts to rehabilitate alcohol and drug abusers.

Equivalent to 140-574.

RC-572 Behavior Approach to Accident Prevention 3 cr.

Behavioral aspects of accident prevention from physiological, psychological, sociological and cultural perspectives; identifying, understanding and modifying attitudes and behavior.

Equivalent to 140-575.

RC-581 Occupational Safety/Loss Control 2-3 cr.

Fall, Spring and Summer

Overview of occupational accident prevention programs: techniques of measurement, cost of accidents, locating and identifying accident sources, and problems of selecting corrective action.

Equivalent to 140-581.

RC-583 Voluntary OSHA Compliance 2-3 cr.

Fall and Summer

Implications of Federal Occupational Safety and Health Act of 1970 on industrial operations, systematic self-inspection and compliance procedures.

Equivalent to 140-583.

RC-586 Fire Protection 3 cr.

Spring

Behavior of fire: chemistry, protection, prevention and control.

Equivalent to 140-586.

RC-587 Human Factors Engineering/Ergonomics 3 cr.

Fall

Physiological and psychological abilities in human/machine interface, working performance, reliability, comfort and safety; effective design of people and work environment as a cybernetic system.

Equivalent to 140-587.

RC-588 Construction Safety 2 cr.

Fall and Spring

Analysis of hazards, control procedures and systems related to typical construction equipment, tools and materials safety problems.

Equivalent to 140-588.

RC-589 Fleet Risk Control Management 3 cr.

Spring

Overview of logistically-oriented management systems required to control risk in fleet operations including internal standards development/analysis, emergency response, accident analysis, loss benchmarking, driver selection and training, vehicle operation, substance abuse testing, hours of service, vehicle maintenance/inspection, route planning, cargo/personnel security, hazardous materials and regulatory controls.

Equivalent to 140-589.

RC-590 Product/Service Liability 2 cr.

Spring

An analysis of product liability losses, laws and controls.

Equivalent to 140-590.

RC-592 Construction Risk Management 3 cr.

Analysis and application of fundamental process steps for construction job site risk management.

Equivalent to 140-592.

RC-700 Semiconductor Risk Control 1 cr.

Spring

Risk control (safety, health, environmental) aspects of the semiconductor industry, hazard identification, reduction and control.

Equivalent to 140-700.

RC-734 Safety Engineering Standards 2 cr.

Fall

Analysis of legal and voluntary industrial workplace standards and regulations.

Equivalent to 140-584.

RC-735 Field Problem in Risk Control 3 cr.

Fall, Spring and Summer

An operational experience which requires identification of a technical and/or administrative problem in an occupational setting. The problem is researched, analyzed for alternative operational countermeasures, and field tested to determine the effectiveness of the solutions.

Equivalent to 140-783.

RC-781 Risk Management in Loss Control 3 cr.

Fall

An in-depth view of workers compensation, liability (general products) and property insurance, with respect to their safety and health loss control.

Equivalent to 140-781.

RC-782 Risk Control Management 3 cr.

Spring

An in-depth study and application of current administrative, organizational, and supervisory practices, which are specifically and uniquely related to managing industrial or occupational loss prevention and reduction systems.

Equivalent to 140-782.

RC-784 Internship-Risk Control 2-4 cr.

Fall, Spring and Summer

Full-time, supervised work and learning experience in an appropriate professional setting.

Equivalent to 140-784.

RC-785 Seminar in Risk Control 2 cr.

Spring

Current topics, trends and methods in risk control are examined, discussed and evaluated. Extensive industrial facility visits are conducted and analyzed.

Equivalent to 140-785.

RC-787 Ergonomics Instrumentation Practicum 2 cr.

Fall and Spring

Comprehensive study of instrumentation-based work analysis techniques. Quantitative assessment of physiological and environmental workplace stressors and means of controlling such factors are examined with regard to force/exertion, posture, repetition and speed.

Equivalent to 140-787. Prerequisites: take RC-587.

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AEC Architecture, Engineering and Construction

AEC-570 Construction Estimating I 3 cr.

Fall and Spring

Estimating and analyzing material, labor, equipment, methods of construction, overhead and profit, and submitting these factors in the form of a bid.

Equivalent to 150-570, 182-570.

AEC-575 Construction Practicum 2-4 cr.

Summer

Technical information, construction problems and actual development of light residential structure.

Equivalent to 170-575, 182-575.

AEC-595 Seminar 1-2 cr.

Summer

(Title will reflect specific construction content). Current and projected methods, concepts, technologies and innovations in construction. Equivalent to 182-595.

R

AEC-638 Contract Requirements and Specifications 3 cr.

Fall and Spring

Principles of contract requirements and construction specification organization. Development of basic skills of project manual preparation. Demonstration of role of specifications within the construction process and relationship to other construction contract documents.

Equivalent to 130-526, 182-538.

AEC-652 Environmental Systems HVAC 3 cr.

Spring

Principles of heating, ventilating and air conditioning; analysis and selection of systems and equipment.

Equivalent to 182-552.

AEC-653 Plumbing and Electrical 3 cr.

Spring

Plumbing, electrical and illumination systems for light and heavy construction.

Equivalent to 170-570, 182-553.

AEC-658 Structural Systems Wood and Steel 3 cr.

Fall

Analysis, selection, and delineation of wood and steel structural components and systems in buildings.

Equivalent to 130-528, 182-558.

AEC-659 Structural Systems Concrete and Masonry 3 cr.

Fall and Spring

Analysis, selection, and delineation of concrete and masonry structural components and systems in buildings.

Equivalent to 182-559.

AEC-670 Construction Estimating II 2 cr.

Fall and Spring

Computer-based estimating systems for construction. Take-off, pricing, bid preparation, resource and cost studies, and database operations.

Equivalent to 182-571.

AEC-671 Project Scheduling and Cost Control 3 cr.

Fall and Spring

Total concept of construction industry: contracting, financing, bidding, planning, organizing, coordinating, and controlling functions and techniques.

Equivalent to 150-670, 182-670. P: AEC-570.

AEC-672 Management of Construction 3 cr.

Fall and Spring

Organizing, managing and operating the contracting firm.

Equivalent to 182-572.

AEC-792 Special Projects in Construction 2-6 cr.

Fall, Spring and Summer

Substantive study and activity for specialists in the construction field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant. Preparation of a technical report may be repeated for a maximum of six semester credits.

Equivalent to AEC-798, 182-798. R

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APRL Apparel Design/Manufacturing

APRL-545 Textiles for Interiors 2 cr.

Spring

Raw materials, fabric structures, specifications, and legislation related to quality, performance, and maintenance of textiles for commercial and household uses.

Equivalent to 214-545.

APRL-550 Textile Evaluation 3 cr.

Fall

Problems in fiber identification, fabric performance and care; chemical and microscopic testing procedures; methods for gathering and interpreting data; individual problems.

Equivalent to 214-550.

APRL-555 Special Topics in Apparel Design/Manufacturing 1-3 cr.

Special topics in clothing and textiles. Repeatable for different topics.

Equivalent to 214-555. R

APRL-567 Engineered Tailoring 3 cr.

Fall

Industrial production methods applied to construction of tailored garments.

Equivalent to 214-568.

APRL-581 Functional Clothing Design 3 cr.

Fall

Application of physical science theory to problems in clothing design: impact protection and thermal balance of the human body, structural properties of materials, and apparel forms.

Equivalent to 214-581.

APRL-582 Advanced Pattern Development 3 cr.

Fall and Spring

Develop advanced patterns for garments by draping fabric and using a computer-aided design system.

Equivalent to 214-582.

APRL-590 Practicum in Textile Design 3 cr.

Use of textile design techniques as means of artistic expression: stitchery, weaving, knotting, applique and hooking; emphasis on good design and creativity.

Equivalent to 214-590.

APRL-594 Knit Design and Technology 3 cr.

Fall and Spring

Stitch formation and patterning of warp and filling knits. Influences on aesthetics and performance of knit fabrics. Design and production of knitted fabric and garments on a flat bed knitting machine, including use of CAD techniques.

Equivalent to 214-594.

APRL-605 International Study Tour to the Fashion Industry 1-6 cr.

Spring

Tour of international centers of clothing, textiles, and related arts. Study of the cultural patterns. Program includes lectures by consultants and seminars on the various phases of the fashion and fabric industries.

Equivalent to 214-605. R

APRL-610 History of Costume Ancient to European 3 cr.

Fall

Development of costume throughout the ages: fashion as it reflects past cultures and influences present day costume.

Equivalent to 214-610.

APRL-611 History of Fashion 19th Century to Present 3 cr.

Spring

A study of the evolution of fashion from the 19th century to the present concentrating on the impact of the fashion designer and changing fashion trends.

Equivalent to 214-611.

APRL-619 National Study Tour to the Fashion Industry 1 cr.

Fall and Spring

Five-day visit to New York or alternate city: study hours, discussions and lectures by leaders in American fashion market.

Equivalent to BURTL-619, 214-639, 214-619. R

APRL-680 Draping 3 cr.

Fall

Application of draping principles in design and construction of garments; emphasis on creativity.

Equivalent to 214-680.

APRL-685 Apparel Design Studio 3 cr.

Spring

Creation, development, and formal presentation of original designs using flat pattern and/or draping techniques. Preparation of professional portfolio to include CAD and other illustrative materials representative of individual expertise.

Equivalent to 214-685.

APRL-695 Historic and Contemporary Fabrics 3 cr.

Eniques of decorating historic and contemporary fabrics; contribution of decorative fabrics to enrichment of human experience.

Equivalent to 214-695.

APRL-735 Problems in Textiles, Clothing and Retail Marketing 2 cr.

Fall, Spring and Summer

Identification, selection and completion of a problem in textiles, clothing, and retail marketing culminating in a Plan B paper.

Equivalent to BURTL-735, 214-768. P: EDUC-740.

APRL-755 Topics in Clothing and Textiles 1-2 cr.

In-depth investigation of a specific area of clothing or textiles. A current topic that lends itself to a lecture discussion method of instruction will be selected for study.

Equivalent to 214-755.

APRL-769 Design Option Thesis 2-6 cr.

Fall, Spring and Summer

Independent research under direction of investigation adviser culminating in a design show. A descriptive paper written according to thesis standards, including slides, will be presented. Consent of program director.

Equivalent to 214-769. P: EDUC-740.

APRL-770 Thesis Textiles, Clothing and Retail Marketing 2-6 cr.

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Consent of program director.

Equivalent to BURTL-770, 214-770. P: EDUC-740.

APRL-780 Advanced Draping 1 cr.

Manipulation of various fabrics on a dress form to develop garments from given and self-designed sketches that reflect advanced techniques. Construct

garments from patterns.
Equivalent to 214-780. P: APRL-680.

APRL-781 Advanced Flat Pattern 2 cr.

Draft and develop paper patterns for garments by varying a master pattern from given and self-designed sketches that reflect advanced techniques. Construct garments from pattern. Instructor's consent required.
Equivalent to 214-781.

**APRL-790 Seminar in Textiles, Clothing and Retail Marketing
2 cr.**

Review, evaluation and interpretation of current research in textiles, clothing and retail marketing.
Equivalent to BURL-790, 214-790.

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CADD CADD/Drafting

CADD-595 Seminar 1-2 cr.

Summer
(Title will reflect specific design, research and development content.) Current and projected communication methods, concepts, technologies and innovations in design, research and development.
Equivalent to 183-595. R

CADD-600 Workshop: 1-3 cr.

Fall, Spring and Summer
Special topics in design, research and development, providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop.
Equivalent to 183-600. R

CADD-636 Computer Assisted Design Problems 3 cr.

Spring
Advanced CADD applications. Construct three dimensional wireframe drawings. Perform finite element analysis on select components. Customize software for specific applications. Customize software for specific applications. In-depth analysis of CADD applications in mechanical and architectural design.
Equivalent to 130-636, 183-636.

CADD-666 3-D Computer Modeling and Rendering 3 cr.

Spring

Development of three-dimensional computer models and computer graphic images. Includes 3-D surface modeling and rendering.

CADD-792 Special Projects in Drafting/Product Design 2-6 cr.

Substantive study and activity for specialists in the design, research and development field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in design, research and development. Preparation of a technical report may be repeated for a maximum of six semester credits.

Equivalent to CADD-798, 183-798. R

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ELEC Electricity/Electronics

ELEC-595 Seminar 1-2 cr.

Fall, Spring and Summer

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in electricity/electronics or power mechanics.

Equivalent to 184-595. R

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MECH Engineering Mechanics

MECH-532 Mechanical Design 4 cr.

Spring

Analysis and design of machine elements: gearing bearings, shafting and friction devices.

Equivalent to 183-532.

MECH-537 Mechanical Design Drafting 2 cr.

Fall

Design of a machine, specifications, layout, calculations, bills of material, detail and assembly drawings.

Equivalent to 130-537, 183-537.

MECH-592 Mechanics of Machinery I 3 cr.

Spring

Dynamics of machinery: rectilinear and curvilinear motion; translation and rotation of a rigid body, force-acceleration equation, impulse and momentum; work, power and energy; balancing and vibration.

Equivalent to 130-592, 183-592.

MECH-593 Mechanics of Machinery II 3 cr.

Fall

Graphical analysis and synthesis of linkages, cams, gear trains, displacement, velocity, acceleration and dynamic forces.

Equivalent to 130-593, 183-593.

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MFGE Manufacturing Engineering

MFGE-690 Manufacturing System Design Problems 1-3 cr.

Fall, Spring and Summer

Manufacturing system design through the application of previously learned principles and techniques. Issues to be addressed include: product design for manufacturability, process and tooling design and fabrication, system layout and equipment configuration, information and control architecture, implementation of quick-changeover strategies, task sequencing and scheduling, and simulation and evaluation of alternatives.

Equivalent to 181-690.

MFGE-792 Special Projects in Manufacturing Engineering 2-6 cr.

Substantive study and activity for specialists in the industry and technology field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant. Preparation of a technical report. May be repeated for a maximum of six semester credits.

Equivalent to MFGE-798, 181-798. P: TECED-739.

MFGT Manufacturing Technology

MFGT-503 Computer Aided Manufacturing 3 cr.

Fall and Spring

Justification for and application of computer assistance in manufacturing process; machine process control, inventory and materials handling, robotics and automated assembly, product design and part grouping in relation to total manufacturing operation.

Equivalent to 170-504, 181-504.

MFGT-505 Robotics 2 cr.

Fall and Spring

Capabilities of and justification for industrial robots; lab work with robots and simulators in processing, assembly and materials handling.

Equivalent to 170-505, 181-505.

MFGT-545 Design and Simulation of Manufacturing Cells 3 cr.

Fall and Spring

Applied manufacturing system design and evaluation. Group technology approach. Computer assisted coding and classification. Development of part families. Efficient design of manufacturing cells. Evaluation of manufacturing system designs using simulation and other techniques. Basic statistics and computer programming abilities desirable.

Equivalent to 170-540, 181-540.

MFGT-600 Workshop: 1-3 cr.

Fall, Spring and Summer

Special topics manufacturing, providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop.

Equivalent to 181-600. R

MFGT-792 Special Projects in Manufacturing Technology 2-6 cr.

Substantive study and activity for specialists in the industry and technology field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant. Preparation of a technical report. May be repeated for a maximum of six semester credits.

Equivalent to MFGT-735, 181-798, P: TECED-739.

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PKG Packaging

PKG-535 Packaging Machinery (3 cr.)

Spring

Weighing, forming, filling, sealing, cartoning, capping, labeling, wrapping, casing, uncasing, palletizing/depalletizing machines as applies to the functional capabilities of speed, materials, containers, and operating functions.

PKG-690 Packaging Development (3 cr.)

Fall and Spring

Applications of packaging functions: developing a product's complete packaging system, from final production of product to consumer.

PKG-695 Packaging Seminar (2 cr.)

Fall and Spring

Current packaging problems or developments (subject based on students' interests and current issues).

PKG-740 Food Packaging Laboratory (3 cr.)

Spring

Solve complex and interrelated problems in food packaging research/development through understanding of the interrelationship of food and packaging and laboratory testing methods

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POWER Power

POWER-595 Seminar 1-2 cr.

Fall, Spring and Summer

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in electricity/electronics or power mechanics.

Equivalent to 185-595. R

POWER-798 Problems in Power 2-6 cr.

Fall, Spring and Summer

Substantive study and activity for specialists in the power field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in power technology. Preparation of a technical report. May be repeated for a maximum of six semester credits.

Equivalent to 185-798.

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RD Design, Research and Development

RD-520 Prototype Development and Model Making 3 cr.

Spring

Introduction to model making and prototype development/construction. Competencies are developed in converting design, research and development and other creative ideas into three-dimensional objects using traditional and nontraditional machining and forming techniques. Three-dimensional design form the core of this course.

Equivalent to 170-520, 130-532, 183-520.

RD-620 Research and Development 2 cr.

Fall and Spring

Research and development procedures applied to specific industrial material and processing problems.

Equivalent to 170-620, 183-620.

RD-620 Research and Development 2 cr.

Fall and Spring

Research and development procedures applied to specific industrial material and processing problems.

Equivalent to 170-620, 183-620.

RD-621 Research and Development Laboratory 1 cr.

Fall and Spring

This lab is taken in conjunction with RD-620 to allow students in technical majors to fulfill the requirements of the major research and design project.

Equivalent to 170-621, 183-621. P: RD-620.

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TRANS Transportation/Energy

TRANS-595 Seminar 1-2 cr.

Fall, Spring and Summer

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in transportation.

Equivalent to 186-595. R

TRANS-735 Problems in Transportation/Energy 2-6 cr.

Fall, Spring and Summer

Substantive study and activity for specialists in the transportation/energy field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in transportation/energy.

Preparation of a technical report. May be repeated for a maximum of six semester credits.

Equivalent to 186-798.

TRANS-792 Special Projects in Transportation/Energy 2-6 cr.

Fall, Spring and Summer

Substantive study and activity for specialists in the transportation/energy field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in transportation/energy.

Preparation of a technical report. May be repeated for a maximum of six semester credits.

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ECE Early Childhood Education

ECE-621 Administration of Early Childhood Programs (2 cr.)

Fall

A study of program organization, program design, staffing, licensing, certification, equipment and facilities for operating early childhood education programs. Field trips required.

ECE-627 Child Abuse and Neglect (2 cr.)

Fall

Systemic nature, forms and indicators, and prevention of abuse/neglect. Factors contributing to, and intervention skills in, coping with the effects of abuse/neglect on children and families at risk.

ECE-664 Special Topics in Early Childhood Curriculum (1-3 cr.)

Philosophy and methodology of early childhood education: problems confronting teachers.

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ECE-766 Trends in Early Childhood Education (3 cr.)

Overview of trends in early childhood education with emphasis on problems confronting teachers in establishing early childhood programs in communities and schools.

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